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THE RECENT ECONOMIC HISTORY OF THE UNITED STATES.

I. The Revival after 1896.[1]

The topic chosen as the subject of this paper is far removed from abstract economic theory. We may safely call it one of the foremost practical questions of the day, politically as well as financially. What we have to ask is, How the United States managed so to reverse its position in the past ten years that, instead of the crippled industrial and financial state of 1894, with the country's principal industries declining, its great corporations drifting into bankruptcy, and its government forced to borrow on usurious terms from Europe to maintain the public credit, we have seen, in the short space of half a dozen years, a community whose prosperity had become the puzzle of the outside world, whose productive industries had developed such strength that the "American invasion" was lately dis-

[1] This article gives the substance of lectures given at Harvard University in November, 1904.

cussed abroad as threatening ruin to our European competitors, whose corporations, when properly capitalized and managed, had grown so profitable that the strongest financial interests of the world have been struggling to buy possession of them, whose banking-houses subscribed in important sums to new English and German government loans, not to mention the public bond issues—$100,000,000 in all, within the past seven months—of Cuba, Japan, and Mexico? The startling ups and downs of fortune which have occurred in other communities are familiar. The story of alternating "booms" and panics is largely the story of modern industrial progress. It is, however, the fact of a complete revolution in this country's position, not only as regards its own enterprise, but in its relation to other industrial States, which challenges particular attention; and it is this which we now have to examine. I shall begin with the date when American business depression appeared to be most profound,—the year 1896.

Four events of the first importance, bearing directly on American finance, have occurred in the period between that date and the present time; and the rise in American financial and industrial prestige has been ascribed in turn to each of them. These incidents are the European harvest failure of 1897, the Spanish War of 1898, the establishment by law of the gold standard for this country in 1900, and the unprecedentedly large production of gold, in the world as a whole, and in America in particular, during most of the years referred to.

Of the European harvest failure of 1897, and the profitable export trade which was thereby opened to this country, it may be said that it did more than any single influence to start the ball of prosperity rolling in this country. It did so because agricultural depression had been the most discouraging factor in the hard times from 1892

to 1896. More than one-third of this country's population made its livelihood from farming at the time of the census of 1890; and an incident of this sort, which changed their market from one which had hardly given a living return to one whose profits were enormous, was bound to affect our national welfare. But there is this to be remarked at the outset. There has been no European famine since 1897. On the contrary, foreign harvests have continuously increased. Yet the prosperity of our own agricultural community has grown steadily brighter, and the prices at which it has sold have continued highly remunerative. Some other influence than the events of 1897 must therefore have been at work.

I have personally heard a great international banker ascribe our enlarged financial prestige to the country's display of strength in its defeat of Spain. To this convenient argument it is entirely safe to answer that the theory is something to be believed only when it is proved, and that the burden of proof rests on him who asserts it. European capital *might* come more confidently into this country because it had concluded that we were able at need to defend ourselves. But this, as an explanation of our prosperity since 1898, comes to very little when one reflects that the movement of foreign investment capital, after the Spanish War, was not into this country, but away from it, and this for the simple reason that American capital was bidding so high a price for such of our securities and real property as were then held by foreign investors that they deemed it wise to sell. Furthermore, if a successful war must of itself be a stimulus to national prosperity, then it remains for those who hold that view to explain the severe industrial reaction in Great Britain since its victory over the Transvaal or the years of hard times which, in England and on the Continent, followed Waterloo.

The formal establishment of the gold standard in 1900, and the provision by law of a gold reserve sufficient to insure redemption of our legal tender notes, have undoubtedly been contributing influences towards our subsequent forward movement of prosperity. But they have been so rather because they removed a hindrance to such favorable development than because they provided the means for it. Capital will be reluctant to risk itself in a country where it is uncertain what the standard of value will be when it looks for its returns. But, even if it be assured on this score, it will not for that reason rush into the enterprises of a country where profitable results are not in sight. What we have to ascertain is why such inducements offered by the industrial United States after 1898 were so unusually great.

There may be mentioned, finally, the possible influence of the increased gold production during the past ten years. The world's annual gold output, which was $203,000,000 in 1896, rose to $328,000,000 in 1903. This is an increase in the annual output of $125,000,000 in the seven-year period, whereas the increase was but $80,000,000 in the seven years preceding 1896, and only $21,000,000 in the seven years before that. There is no doubt that this increase had some effect on the financial movement of the period. How much effect is a controverted question. Professor Cairnes showed fifty years ago, when the new gold was pouring in from Australia and California, that prices of commodities, the world over, were affected because, primarily, the new mining communities gave large orders for goods to the older manufacturing States, thus creating a new demand, which paid its price not in other merchandise, but in gold. It is difficult to trace this process in the gold production of to-day; for the world's great gold-fields are now owned, as a rule, not by scattered individuals, but by corporations with

inflated capital. One thing is certain, that the banking and credit institutions of the world have been able, through the increased gold production, to accumulate larger reserves of gold. As those reserves are the basis for credits granted by them to the financial market, it follows that greater and more confident activity of credit has been possible. M. Paul Leroy-Beaulieu has pointed out that more than one-half of the gold now held in the reserves of the world's great banks and of the United States Treasury has been accumulated since the great expansion of annual gold output began in 1890. But, even if we were to concede the whole claim of the quantitative money school, we should still have to confront the question why the United States should have been the main beneficiary. Increase in gold production since 1890 has been largest of all at the Transvaal mines, which England owns; yet it is England, of all important industrial States, which has shown least signs of an industrial "boom."

I believe that, as time goes on and we are able more and more clearly to look at this remarkable period in perspective, we shall find the main clew to its striking history in the altered position of the world's agriculture. I think we shall find that this agricultural change occurred, as did the change in the movement of American finance, in the years 1896 and 1897. The year 1896 was, in fact, one of those periods, rare in the history of any country, of which it could be said that a given chapter had definitely closed and that another was about to open, and when, therefore, the events of the preceding epoch could be classified and passed upon without fear that the judgment would be modified or upset by the events of a succeeding year. This could not be said of such interesting financial twelvemonths as 1866, 1873, 1890, 1893, 1898, 1901, or 1903, because the events of no one of those years

could have been understood except in the light of the years which followed it. It cannot be said of the present period; for we have lately had interesting evidence that the reaction of 1903 was an incident in the American revival, not the end of it, and that the country is still under the sway of the same general influences which started the great recovery, seven or eight years ago.

The assertion that a turning-point had been reached in our financial history would hold, however, of 1848, the year when the development of our railway system really began; and of 1879, when we became in fact the world's granary, simultaneously with our abandonment of a depreciated money standard. It is peculiarly true of 1896, and for the reason that two events, one of world-wide significance, the other of peculiar significance to this country, then occurred. These two events were the beginning of a great recovery in the price of products of the soil and the final defeat of the agitation for free-silver coinage.

It is agreed by all statisticians that the average of commodity prices, the world over, reached low-water mark in 1896 and 1897. Sauerbeck's London index number gives an average of 61 to the year 1896 and of 62 to 1897. Taking the average by separate months, however, most authorities place the lowest level in midsummer, 1897. Figures of *Dun's Review*, adopted by our government's Bureau of Statistics, give a unit of 72.455 for July, 1897, as against 77.780 at the end of 1895 and 75.502 at the end of 1896. The London *Economist*, using another unit, gives 1885 in July, 1897, against 1947 twelve months before and 1915 twelve months afterwards. By the year 1900 the Sauerbeck average had risen from 61 to 75, the *Dun's Review* unit from 72.445 to 95.295, and the *Economist* index number from 1885 to 2211. These figures are the embodiment, in the form of dry statistics,

of a good deal that happened during the interval. Summed up, they show a recovery in staple prices, between the low level of 1896–97 and the recent high level of 1900, ranging, according to method of striking averages, from 17 per cent. to 31 per cent. By far the most important gain, and the gain that has been most persistent, not only up to 1900, but since that time, has been scored by average prices in agriculture.

Our space will not admit of going into the general causes of this recovery. In general, however, we may say with entire safety that between 1891 and 1896 the world's annual production of agricultural products increased much faster than the annual consumption, whereas since 1896 the world's use of grain and cotton has increased much more rapidly than the increase in its crops. A steady increase in consumption is natural, because of increase in population. In good times, such as we have lately witnessed, the increase will be more rapid than in hard times, like those of 1890 and 1893. The past half-dozen years, moreover, have opened new and extensive markets for wheat and cotton in the East. These are among the important factors in the persistent rise of agricultural prices and in the general trade recovery. What we have now to consider is exactly the manner in which this revival came about and the immediate, tangible effect upon this country.

And here we find a very striking and dramatic connection between the two distinctive occurrences of 1896, the recovery in grain prices and the defeat of the free-coinage party. I need hardly review the political situation at the opening of that year. President Cleveland had rescued the gold standard of currency when its overthrow seemed to be inevitable, but he had done so through the employment of an immensely expensive banking syndicate and at the cost of the disruption of his party. The

agricultural West and South, in the grip of the most profound depression, revolted at the idea of the virtual payment of five or six million dollars to a group of bankers to preserve a currency standard under which wheat and cotton were selling at the lowest prices ever known. Indeed, their own politicians told them that the silver standard averted by that contract was the short road to high prices. The Populist party, an open advocate of free-silver coinage, had polled in the 1892 election a million votes, or more than one-fifth the vote of the Republicans, and had carried outright four States,—something never achieved by a third-party candidate since the election of 1824; and it now made its bid for alliance on the coinage issue with the Democracy. The consequence of this situation was the excited and tumultuous Democratic convention at Chicago, where, by a turn of events more like the politics of the French Revolution than like those of the United States, a young Nebraska Congressman, thirty-six years old, previously unknown in national politics, delivered a speech of florid and impassioned eloquence which so exactly voiced the high-pitched resentments and aspirations of the delegates that he was chosen as their candidate, almost by acclamation. As a matter of course, the platform demanded immediate free-silver coinage.

A month before this memorable convention the Republican party nominated Mr. McKinley; and here, too, the logic of events moved more potently than the purposes of men. McKinley's legislative record was that of a silver advocate. On November 5, 1877, his vote was cast in Congress for the Bland bill "to authorize the free coinage of the standard silver dollar"; and in the following February he voted to pass the amended free-coinage bill over the veto of a Republican President. He had naturally also voted with his party for the silver-purchase act of 1890. But he had been in 1890 the head of the Congres-

sional committee which drafted the bill imposing the highest protective duties in our history, and he was avowedly made the party's candidate in 1896 on the theory that return to high protection, after the lower tariff of 1894, would be the campaign issue. The tariff, however, was not destined to cut any appreciable figure in the contest. Mr. McKinley's campaign began with speeches on protection; but it soon appeared that, on the tariff issue alone, the Republican party could not win. A great body of Democratic voters stood aloof from either party. They would not indorse the Bryan free-coinage candidacy, but were halting between the alternatives of supporting an independent Gold Democratic ticket, nominated by bolting Democrats, or voting for Mr. McKinley, in the face of his tariff record, which was to most of them thoroughly objectionable. Ordinary common sense dictated the policy to be pursued under such circumstances. Mr. McKinley, in his successive speeches to visiting delegations at Canton, said less and less about the tariff, and more and more about the currency, until on July 30 he took ground flatly for the gold standard.

But the election was not won, and it probably could not have been won, by any speech of the candidate. I pass over the striking financial incidents of the year,—the violent disturbance of financial markets, the drain on the Treasury's gold through presentation of government notes for redemption, until a banking syndicate had to be hurriedly formed to avert another crisis, and the one per cent. premium which was paid on gold itself the week before election. Long before the November vote was cast the attention of the markets converged on a very different quarter. In August, wheat touched the extraordinarily low price of 53 cents a bushel on the Chicago market,—a figure nearly unremunerative to all but the most favorably situated farmers. Our own early wheat

crop was large, and Europe's had never but once been exceeded. Nothing appeared to promise relief to our farm community in the way of higher prices. By September, however,—two months before election,—some new influences came on the situation. The later American wheat crop was badly damaged, first by drought, and then by rains at harvest time. This would not have helped our farmers, even with a rise in price; but the larger news was of partial failure of the crop in India, whose harvest turned out smaller by nearly 25 per cent. than in the preceding year. That country, which had sent 56,000,000 bushels to the outside world in the crop year 1891, was actually forced to import wheat in 1896. This happened when the consuming world had been using wheat, at the low prevailing prices, with the greatest freedom, and when, accordingly, supplies of wheat on the world's great markets had fallen to the lowest level since the famine year 1891. In September, 1896, there were 126,000,000 bushels against 152,000,000 a year before, and 190,000,000 two years back.

The news of the crop failure in India, coming on such a critical situation, forced Liverpool instantly to raise its bid for American wheat. As against the August price of 53 cents per bushel, wheat rose at Chicago to 70 cents in September, to 74⅞ in October, and to 94⅜ in election week. The moral effect of this movement was very great. What it meant, politically, was shown by the quick assertion of Mr. Bryan's party managers, that the "money power" was putting up wheat, over election day, to delude the agricultural voter. This explanation of the rise, in view of the facts which I have cited, was at least superfluous. The point which it tacitly recognized, however, was that the Western voter had been told that, under the gold standard, wheat could not rise again; and here, with the gold standard still in operation, was

wheat at the highest price in years. The political result of this rise in wheat, notably in the doubtful Western States, was very great. It largely accounted for McKinley's heavy majorities in farming States of the Middle West, such as Ohio, Michigan, and Minnesota, which in 1892 gave to the Democratic and Populist votes, combined, a plurality of 21,000, whereas in 1896 the Republican vote in the same three States ran 148,000 votes ahead of its two antagonists.

The election of 1896, in fact, settled the question of a gold standard. The large majority of 95 for McKinley in the electoral college, and the popular plurality of 602,555 in the country as a whole, where even the "landslide" of 1892 gave Cleveland only 380,961 plurality, set the seal of the voters effectively on the verdict. But the election results did not, as many people still believe, bring immediate prosperity. On the contrary, the first half of 1897 was a period of business uncertainty and financial depression. I wish to emphasize this fact, because some important conclusions hang upon it. There are several ways of testing the real prosperity of such a period. One is by the exchange of bank checks, which fairly measure industrial activity. Now the first half of 1896 had been a time of great depression; yet the checks drawn on all the country's banks in the similar period of 1897 showed decrease of $570,000,000, or 2¼ per cent. Or we may look at the record of business failures. In the second quarter of 1897 liabilities involved in such commercial disasters throughout the country were $3,000,000 greater than in 1896. Again, there is the very useful test of the country's iron production; for it has been an invariable precedent that, when trade and industry are reviving, production and use of iron increases along with them. Now in July, 1896, there had been in blast in this country 191 foundries, with a weekly output of 180,500 tons,

and with 815,000 tons piled up in their yards. This was then called a very unfavorable showing; yet in July, 1897, the number of furnaces in blast had further decreased 46, to 145, weekly output had fallen 16,000 tons, to 164,000, and the idle stock of iron had risen nearly 200,000 tons, to 1,004,000. Or, finally, one may look at the purchase of securities on stock exchanges, which reflects the investment public's feeling. In New York City the record of such transactions for the first half of 1897 fell a million shares below 1896, and twelve million below the same months in the fairly active year 1890.

Let this point, then, be carefully noticed,—that the Presidential election of 1896 was not followed by a sudden beginning of commercial recovery. The contrary seemed for months to be true, just as industrial depression persisted immediately after the Specie Resumption of 1879 and, again, after the Repeal of the Silver-purchase Act in the autumn of 1893. But, with midsummer of 1897, we approach a very remarkable change in the situation. I have already shown, from the various index numbers of prices, that low ebb in this regard was really reached in July, 1897. About that time occurred two noteworthy events. One was the enactment of the Dingley Tariff law, which occurred July 23, that year, and which restored the import duties, reduced by the Wilson Tariff Act of 1894, to a highly protective basis. The other—on which no human judgment could have reckoned, any more than it could on the Indian famine of 1896—was a devastating crop failure in Europe.

It is no longer the fashion to ascribe the recent great "boom" in American prosperity to the Dingley Tariff. Political platforms occasionally make the claim, but there are two reasons why serious thinkers disregard it. One is that the similar increase in duties by the McKinley Tariff of 1890 was followed, not by prosperity, but by

disaster. The other is that our later industrial recovery found expression chiefly in an enormous export trade. If higher import duties had any influence on that, they must have checked it, because raw materials used in exported manufactures were now taxed more heavily, and because, all other things being equal, restriction of imports through such taxes normally curtails the movement of exports sent in exchange for them. But the case of Europe's harvests was another matter.

We have seen that, although the Indian wheat crop failure of 1896 made a great hole in the world's supplies and caused an immediate rise in the price of wheat, nevertheless Europe itself raised in that year a crop of good proportions. What happened in 1897 was, first, that a scorching drought in France cut down the season's wheat yield in that country 93,000,000 bushels from 1896; next, that a wet harvest reduced the Russian crop nearly 80,000,000 bushels; and, finally, that a season of storms flooded so disastrously the Danube Valley that Austria and the Balkan States gathered less wheat by 127,000,000 bushels than in the preceding year. The whole European crop fell short of 1896 by 350,000,000 bushels,—a loss of no less than 30 per cent. Had the American harvest of 1897 remained at the figures of the year before, a great disaster would have befallen Europe. This country's fortune had, however, stood it in good stead. The high price of wheat in the autumn of 1896 had encouraged farmers, the country over, to plant more wheat in the ensuing spring. This increase amounted to nearly five million acres. Weather conditions in the United States were favorable throughout the season. The resultant crop ran 103,000,000 bushels ahead of 1896, and was, with one exception, larger than any previously harvested.

Under the circumstances, it was sold at extraordinarily good prices. By August "dollar wheat" was touched

again on the Chicago Board of Trade, for the first time since 1891; and the price was maintained throughout the ensuing season. At this price, consuming Europe, with its supplies already depleted by the Indian failure of the year before, bought our wheat in quantities quite unprecedented. During the twelve months after the harvest of 1896 the United States exported, in grain and flour, 83,000,000 bushels of wheat. In the same period, after the 1897 harvest, the export was 150,000,000. The value of the season's exported grain increased no less than $122,000,000. One result of this notable trade incident was the import, during the same twelve months, of $120,000,000 gold,—the first natural movement of the kind in this direction since the autumn of 1891. Directly, this inflow of gold, which was lodged with the Treasury in exchange for notes, caused a rise in the government's gold reserve from the $44,700,000 of February, 1895, and the $100,900,000 of August, 1896, to the handsome figure of $245,000,000 in the middle of 1898. That is to say, while the "hundred-million-reserve" against the greenbacks had been continuously impaired between 1892 and 1896, the Treasury reserve, only two years later, had risen to the highest figure ever reached in the government's history.

It need hardly be pointed out that this position made possible the success of the gold-standard act in 1900, as it certainly would not have been possible in 1896. The act of 1900 required, first, establishment of a fund of $150,000,000 gold to insure redemption of the notes of the government. Next, by the facilities which it opened for the establishment of new national banks (their number, since the enactment of that law, has increased 1,873, their capital $163,000,000, and their reserve $165,000,000) it created a new demand for cash, to be held in such reserves. Since increase of govern-

ment paper money had been stopped by the Repeal of the silver-purchase Law in 1893, it followed that this new demand for reserve money must be met from imported gold. In short, nature helped out the later statute of currency reform, as it did the Specie Resumption of 1879. In both cases it was a European famine and a bumper crop at home which lifted us happily over the rough places of the road.

I have described in detail this remarkable incident of 1897, because it is always, and not incorrectly, mentioned as a salient factor in the ensuing trade revival. But it is necessary, at the same time, to keep in mind that one great agricultural windfall of this sort does not make the history of the next half-dozen years. Something more is required for that; and, now that we understand clearly what happened in 1897, it will be easier to determine the influences which carried along the movement of prosperity.

We have seen how the export of our wheat to famine-stricken Europe piled up our export trade and reversed our situation on the international market. The wheat was the primary influence; but scarcely less important was the revival in general trade, shown by the increase in bank exchanges, which amounted during the first half of 1898 to 30 per cent. over 1897. It was natural that this increase should have been greatest in the grain-growing West, to which accrued the first benefits of the successful harvest; and it was natural that, as domestic trade expanded, and with it the demand for money, capital should be drawn from abroad to keep the busy wheels in motion. Now, however, a more novel and dramatic episode of the American trade revival came in sight.

It was not until the close of 1897 that people began to hear, by way of Europe, of "the American invasion." This matter came to the front, as a topic of discussion,

in a remarkable speech delivered at Vienna that December by the Austrian minister of foreign affairs, Count Goluchowski. It was asserted in this speech that "the destructive competition with trans-oceanic countries requires prompt and thorough counteracting measures, if the vital interests of the European people are not to be gravely compromised." "European nations," he concluded, "must close their ranks and fight, shoulder to shoulder, in order successfully to defend their existence." The Continental press at once indorsed this view of the commercial situation. Somewhat later it was declared, in the French Chamber of Deputies, that the talk of the Yellow Peril, by which had been meant the prospective ruin of European industry through cheap Oriental labor, must now give place to recognition of the much more serious American Peril.

Directed as it obviously was at the United States, what did this singular diatribe mean? Certainly, neither Austria nor Europe at large could have been protesting against the "American invasion" of Europe's grain market; for that, in 1897, was Europe's only alternative to famine. It did not require long to discover that Count Goluchowski had his eye on our export of manufactures. The volume of these exports was practically stationary in the eight years between 1882 and 1890, and they increased very slowly after that. In the hard times after 1894, however, when there seemed little hope in a domestic market, our manufacturers began to look abroad. As we have seen in noticing the iron trade figures, even as late as 1897, great stocks of unsold goods had piled up after every effort to stimulate home production. Now it so happened that, while our own markets were passing through that period of despondency, Europe's were reviving rapidly. It is possible that the great increase in South-African gold production—the output was $30,-

000,000 in 1893, $44,000,000 in 1895, and $60,000,000 in 1897—had something to do with this. But it must also be noticed that Europe's shock of financial liquidation occurred in 1890, three or four years earlier than ours, and that European industry, therefore, was naturally earlier in recovering. At all events, industrial revival was under way by 1895, in England and on the Continent; and by 1897 it had assumed the dimensions of a "boom." Into the particulars of that movement I have not time to go: it is enough to say that Germany led in the activity, that England followed, and that it centred on the iron and copper industries,—the one because of new construction called for, the other because of electrical equipment.

I have shown what was our own manufacturers' position. Prices were low, wages were low, material was abundant, the struggle for profits had sharpened the eye for improvements and economies. The one thing needed was an expanding market. At home there was none as yet; but here, in foreign states, had suddenly arisen a demand for manufactured goods so urgent that at the moment English and German manufacturers could hardly fill it. Our people would scarcely have shown themselves possessed of Yankee shrewdness, had they neglected the opportunity; and they did not neglect it. They were, in fact, in a peculiarly favorable situation to take advantage of it. The raw material lay almost at the doors of our factories. Skilled laborers, chafing after their four-year period of partial idleness, could be had at once and in quite sufficient number; and orders from home consumers were so light that scarcely half the producing capacity of well-equipped mills was being used for the domestic trade. Our manufacturers took foreign orders for prompt delivery which the English and German mills were simply unable to accept. They fol-

lowed this up by sales on terms with which the foreigners could not compete. We sold our goods, not only in the so-called neutral markets, but in the English and Continental cities. The result was that between 1893 and 1899 our export of manufactures actually doubled. They were $158,000,000 in the one year, and $339,000,000 in the other; and they increased a hundred millions more in the fiscal year 1900. During the fiscal year 1897, shortly after which Count Goluchowski made his speech, we had enlarged our steel and iron exports by $16,000,000. They were $57,000,000 in that year, and we more than doubled the figure in the next three years.

It is plain enough, from the facts which I have recalled, that there was nothing mysterious about this American invasion, and certainly nothing harmful. If we had so flooded Europe with cheap iron and steel that its own manufacturers lost their market, the case might have been different. But nothing of that sort happened. During the five years between 1894 and the stopping of Europe's industrial boom in 1899, by the Boer War and the German bank panic,—years in which we were enlarging our output and export of manufactured steel,—Great Britain's annual steel production rose from 3,210,000 tons to 5,000,000, Germany's from 3,641,000 to 6,250,000. Both nations found it difficult to keep up with orders, and the price of steel went on advancing all the time. If Count Goluchowski's American invasion had not intervened, some foreign contractor who wanted steel at once would have had to do without, just as some European peasant would have had to go hungry in 1897 but for the famous American wheat crop. The nature of this situation of 1897 and 1899, in manufactured exports, should be carefully kept in mind, because it was a very different situation from that which now exists. Our exports of manufactured goods for the fiscal year

ending last June were in value the largest of our history. They footed up $452,000,000, whereas even in the fiscal year 1900, at the climax of the European boom, they were only $433,000,000. But the past year's steel exports went in close competition with Europe's own manufactures, and they were sold at prices below what American buyers had to pay. Within six months, while American rails could not be obtained by American railways under $28 per ton, they were sold to Canada and Asia Minor for $20. There would be some point to the Austrian foreign minister's warnings in 1904. There was none in 1897, because our manufacturers made no such concessions. It is possible that the Austrian statesman, frightened at our capacity for production and competition, was only looking far ahead.

This brief review may serve to make clear what were the influences under which the upward swing of American prosperity gained its first impetus. The outside world had to buy a much larger quantity of agricultural products, and we had a much larger quantity to sell to it. Its own manufacturers could not produce the merchandise needed to meet the demands of Germany, Russia, and the younger states. Our manufacturers were able not only to supply the deficiency, but to compete on equal terms. Under the circumstances, not only did the volume of our grain and cotton and manufactured exports increase, but their average value rose. It is easy to see why, under such conditions, our total export trade, crossing the billion-dollar mark in 1897, should have arisen to $1,300,000,000 in 1898, to nearly $1,500,000,000 in 1900, and to $1,600,000,000 in 1901. Stimulated by this great outside demand, our trade activity and our industrial profits rose to extraordinary figures.

Nothing seemed capable of checking them, though they had some rude shocks to sustain. The Spanish War,

which broke out in April, 1898, for a month upset completely all the financial markets. Our situation on international exchange, however, was so strong that the very first thing the country did, before the war broke out, was to draw $60,000,000 gold from Europe to protect our bank position. The war was quickly over. We had, also, a demonstration of the new strength of our home resources. The $198,000,000 war loan was taken by home subscribers, and went instantly to a premium. Partly in connection with the war, wheat went to prices, early in 1898, never but once exceeded in twenty-nine years. This was a corner, which broke down as corners usually do; but it was unlike many corners, in that it occurred when the American farmer still had plenty of wheat to sell, and when he received the benefit of the corner prices. Our wheat crop of 1897 was the second largest ever harvested in this country. The crop of 1898 was much the largest on record, and that of 1901 was 10 per cent. larger still. Europe continued to buy heavily, though her own crops resumed their normal magnitude; and thus the tangible prosperity of the grain States and the volume of export trade in that direction were maintained. In so far as American invasion meant simply increase of what this country sold to the outside world, its progress was most extraordinary. The import trade expanded also, but it did not keep pace with exports. In the fiscal year 1893 our imports exceeded exports by $18,700,000. In 1897 the excess of exports was $286,000,000. The next year it was $615,000,000.

This abnormal accumulation of foreign credits had some strange results. First, the pressure of domestic capital on our home investment markets raised prices to unexpected heights. As a result, foreign holders of our securities sold them back; and Europe was practically drained of American stocks and bonds. Then, for

the first time in our history, we began to lend to Europe. The Boer War broke out in October, 1899. English markets were in confusion; and our bankers bought from the Exchequer, first and last, nearly $100,000,000 British government securities. The German government sold us $20,000,000 of its new bonds in 1900, and we lent some $10,000,000 more to Continental cities. Yet the "foreign balance" continued to accumulate. At the close of 1900 it was estimated by international bankers that this country still had a credit fund of at least $200,000,000 outstanding on Europe's money markets. It was, as I well remember, a very common query at that time, in the best-informed financial circles, what was to be the outcome of this wholly unprecedented situation. Some people predicted that it would mean investment of our overflowing capital, on a rapidly increasing scale, in foreign enterprises. It was then that the prophecy was so often heard that New York was destined to displace London, if it had not already displaced it, as the financial centre of the world. On the other hand, the Wall Street community, which took the speculators' view, predicted that the price of outstanding American securities, under this pressure for investment, would rise to unheard-of heights. Neither of these things happened exactly as was predicted, but what did happen was, as we shall presently see, quite as startling as either prophecy.

II. Inflated Capitalization, and the Mania of Speculation in 1901.

The situation in which the American community found itself by 1900 was one which arises at intervals in all prosperous modern states; but its characteristics were emphasized, on this occasion, in a very unusual way. There are certain phenomena which always present themselves in what is popularly called a financial boom. Business, first, must have been prosperous in the community as a whole. Farmers, manufacturers, merchants, and professional men will, as a rule, have been making money and laying by a surplus. This surplus will have grown to large proportions because the memory of recent hard times will have been distinct enough to encourage the laying by of more than usual against a rainy day. During the first years of returning prosperity, therefore, all classes of the community practise economy, and this is what the American people as a whole were doing during the really good times of 1898 and 1899. For a time the same reminiscence which keeps people, under such conditions, from spending their increased profits in increased living expenses, keeps them also from investing their savings freely. There is a very unpleasant recollection of what happened to the money put into land and merchandise and securities a few years before. In default of such investment the community's rapidly growing surplus capital is now placed on deposit with the banks, and by them is offered in the general money market. That market, on the other hand, is always surrounded by a great body of speculators—some of them shrewd and experienced business men, others mere gamblers—who watch for signs of a change for the better in conditions governing intrinsic values, and who, when they see such indica-

tions, borrow from the abundant deposits of the banks, and invest what they borrow in the market, in hope of realizing later to advantage.

Under their purchases, prices rise in all investment markets. The real owners of this surplus wealth, seeing the action of the markets and tired of leaving their own money idle, gradually regain courage and begin to invest on their own account. We call this return of public confidence. Sometimes both speculators and public will have gauged the situation wrongly. Then they lose, as they did in the short-lived "booms" of 1890 and 1895. But we have seen in how singular a way the elements going to make up real prosperity continued to operate in the period which we are studying. The great grain crops, in high demand at home and at export points, gave business to the railways. The prosperous farm communities, which had been stinting themselves through years of adversity, made heavy purchases of farm machinery and household goods. This new demand gave orders to manufacturers, on the one hand, and traffic to the railways, on the other. Incorporated enterprises, therefore, whether railway or industrial, showed largely increased business and paid large dividends. All this time the surplus capital in the public's hands was increasing, and the field for its permanent investment grew more and more inviting. It will inevitably follow, human nature being what it is, that an investment movement will, under such conditions, expand to great proportions.

This is a very old story, familiar to every business man and student of economics. It describes the financial movement between 1899 and 1901, but it describes it no more accurately than it does Germany's "industrial boom" of 1897 or England's "Kaffir craze" of 1894 or the "railway mania" of 1844 or the great American land speculation of 1836, or, for that matter, a score of inci-

dents in the financial history of every modern state. The tracing of this chapter of causes and consequences, however, is specially interesting in the case of our recent financial history, because the magnitude of the forces behind the great speculation of 1901 were almost unparalleled.

I showed, in the first part of this article, to what extent the prosperity of the United States, and its rapid accumulation of new capital, had progressed. We saw how this capital, gathering confidence and pressing on all investment markets, had not only raised prices of our own securities to unexpected heights, and bought back from Europe the bulk of American investments in foreigners' hands, but had overflowed into such quarters as British consols and German treasury bonds. But, after all this, a huge credit fund was still left uninvested on home and foreign markets. At such times, people always wonder what is to be the outcome, and the outcome is always the same. The public has the money, and is eager to invest it: the banking community provides new securities as a field for such investment. These new securities may be good or bad, sound or fraudulent. They may be new enterprises or old enterprises recapitalized. They range in character all the way from worthless zinc and copper mines or "syndicates" promising 25 per cent. on money left in their hands, to use as they see fit, to issues of refunding bonds by a government in high credit. All of these applicants appeared on the scene in 1899 and 1900. But the great banking houses, with their hand on the public pulse, knew that this was mere trifling with the resources at command. The reservoir of American capital seemed inexhaustible: it filled up on one side faster than it could be drained into these various enterprises on the other. It was then that the scheme of recapitalizing American industry was conceived.

This enterprise interweaves itself with the trust question, into which, on its purely economic side, I have no time to enter here. What concerns us, in our present study, is the working-out of the investment process. There were, we will say, a dozen mills in a given industry, doing good business and earning 10 to 20 per cent. per annum for their owners. The promoter—a name which now grew familiar on all American markets—asked the owners to name a selling price. Naturally, as their own retirement from business was involved, the price the owners fixed was high. A banking syndicate would be formed, however, to provide the money requisite for the purchase, and for a handsome payment to the middleman. Thus acquired, the manufacturing plants would be combined and incorporated under the name American Milling Company or United States Spinning Company or International Weaving Company, and the stock would be offered to the public.

As it turned out and as the bankers had expected, the public was in exactly the mood to respond to the invitation. The shares were readily absorbed: other combinations followed. Still, the investment fund showed no symptom of exhaustion. Presently the more venturesome spirits among promoters began to combine these already large industrial combinations into a single company, and to sell the stock of that, at inflated valuations, to the public. This would have been a step too far but for the fact that profits of manufacture, notably in the steel and iron trade, went on increasing faster than promoters could turn their expectations into stock. One notorious expert in this business, Mr. John W. Gates, who rose from the sphere of travelling salesman of a wire-making firm to the leadership of a great combination in the steel trade, was asked on the witness-stand, in March, 1902, to describe the history of his amalgamations.

They began, he said, by the combination of seven wire factories in Illinois into one corporation, which was called the Consolidated Steel and Wire Company. Two months later this company was bought up, along with seven more mills, by the American Steel and Wire Company of Illinois, which issued $24,000,000 stock. This was in 1898. Early in 1899 Gates organized the American Steel and Wire Company of New Jersey, which paid $33,600,000 for the Illinois Company's $24,000,000 stock, added eleven other wire plants, and issued its own stock in the comfortable sum of $90,000,000. The witness was asked what had become of $26,000,000 stock whose destination was not accounted for, and said he did not know. You may perhaps suppose that this wholesale "watering" of capital would at least have led the investing public to bid a low price for the inflated stock, but it did not. Of the $90,000,000 stock thus issued in this later "watering" process, $40,000,000 was preferred as to dividend. It started out on the Stock Exchange at $94 per share, rose in two months to $106, and sold at $112 a year or two afterwards. The $50,000,000 common stock, all of which was virtually given away as a bonus in the "deal," started at $45 per share, and in two months actually rose to $92.

This was a fairly typical case. How far this movement of incorporation went may be judged from the following figures. In the first three months of 1899 new industrial companies, with a total capitalization of no less than $1,586,000,000, were incorporated in this country. During the full year 1899 the total rose to $3,593,000,000, of which respectable sum $2,354,000,000 was the common stock, which by frank confession of promoters, then and afterward, was simply "water." We have already seen, however, how seriously the investing public took even these common shares. They did, in fact, show particular favor to them, for the reason that their relatively lower

price roused the bargain-counter instinct. Furthermore, in the immense industrial expansion of the period, these very common stocks, representing the inflated capitalization of concerns which in not a few cases had been bankrupt four or five years before, were very generally receiving dividends.

It must not be supposed that this series of amazing capital flotations—to use a barbarism of the English market—was placed without occasional friction, interruption, or inconvenience. The Spanish War, with its political and financial uncertainties, arrested the movement in 1898. It was checked again, in the autumn of 1899, by the outbreak of the Transvaal War, the embargo on South Africa's gold production, the severe disturbance of the English money markets, and the downfall of Germany's industrial speculation. The sequel to this change in financial Europe's situation was far-reaching, and we have not even yet shaken off its consequences. I have shown how important a part was played in the rise of our manufacture and export of steel and copper by this European boom. Now the demand from that quarter was suddenly cut off. Instead of inquiring urgently for our manufactured goods, to fill a demand which its own mills could not meet, Europe experienced so sudden a collapse in its home demand that its own manufacturing plants began to compete with one another for what was left of the business, and to cut prices in the competition. Our markets naturally felt the shock. Early in 1900 export orders decreased, and there began a great decline in the price of iron.

This last phenomenon, a familiar sign of general trade reaction, came into view on the eve of another Presidential contest, when Mr. Bryan forced a reluctant Democratic convention to declare for the second time for free-silver coinage. Few intelligent people could be found, under

the prevalent conditions, to predict his victory; and, in fact, McKinley's November majority in the electoral college rose from the 95 votes of 1896 to 137 in 1900, while his plurality, on the popular ballot, increased from 602,555 to 864,688. Bryan, who had carried 22 States in 1896, carried only 17 four years later. Nevertheless, so long as the contest was in doubt, American industry was held in check, and the movement of capital absolutely halted.

It had reason to halt, because, quite apart from the electoral uncertainty, there was enough in the European situation, in the sudden vanishing of the foreign demand which had done so much to build up our export trade, to cause some uneasiness over the future. Where were our manufacturers now to sell their heavily increased output? But what had not been fully taken into reckoning was the capacity of the demand from American consumers to replace this partial loss of the foreign market. It was not, indeed, until this advantageous outlet onto the outside market seemed to have disappeared that the remarkable consuming power of the United States itself was fully appreciated. It was not only true that individuals, in the flush of material prosperity, were buying necessities and luxuries with increased freedom. Even in this direction there was a general tendency which approached extravagance. But a still more powerful demand came from the industries themselves. Iron, for instance, which had sold for $15.45 per ton in the autumn of 1894, brought $29.50 at the close of 1899; that is to say, its price had nearly doubled, and such a market necessarily brought about construction of new plants and enlargement of those already in the field. Iron, for such construction, was bought from existing mills. The same stimulus ran through every other trade. An extremely large demand for new material came from the railways. In 1894 companies representing one-fourth of the railway capitaliza-

tion of the United States were bankrupt, and bankrupt railways are not likely to keep their track and cars and stations and locomotives in good condition. It was the railway industry which had first felt the influence of the great grain harvests of 1897, because it was the railways which had to carry the produce of the farmers to the coast. Naturally, they were in no condition to handle easily this enormous trade in 1897, and, as their profits and credit went on rising, in the subsequent good times, their immediate task was physical reconstruction of their property. What they spent on this, as compared with three or four years before, may be judged from the new railway securities which were sold in the investment markets to procure the money. In 1898 they put out $67,000,000 worth of stock and bonds, mostly for such purposes; in 1899, $107,000,000; in 1900, $199,000,000; in 1901, $434,000,000; and, in 1902, $527,000,000.

This annual increase, which was due in the main to increased purchase of manufactured goods, gives a fair idea of the extent to which the expanding home demands made up, after 1899, for a decreased export trade. In this case the iron industry got most of the benefit, but in a less degree all other industries shared in the expanding trade. With a larger business, profits of the industrial combinations grew larger, and the public, seeing these increased earnings, grew still more eager to invest in their shares. This was the situation which preceded and created what I may call the explosion of speculation at the beginning of 1901,—a period which will possibly, hereafter, have as conspicuous a place in the curious reminiscences of finance as the South Sea Bubble of 1720 and the railway craze of 1844. Its underlying causes were, indeed, identical with the causes of those older episodes, and the principal phenomena of each was the immense amount of new stock issued, the eagerness of the public to buy it,

and the rapidity with which people who bought found the value of their holdings rising. The situation of 1901, in short, was one which turned men's heads. The country seemed to have reached a pinnacle of prosperity from which nothing could dislodge it. The profits of our incorporated enterprises seemed to have no assignable limit. American capital pressed upon every avenue of investment. The most reckless and foolish speculation was apt to achieve success. Looking at the matter philosophically, we cannot wonder that the word went forth, in financial circles previously noted for conservatism, that old precedents of finance were obsolete, that it was no longer necessary to judge the present and future by the past.

The climax of this great speculation came from a peculiar cause, which, I think, we shall understand in the light of what we have already considered, but which the investing public of that day did not understand at all. It became evident, at the close of 1900, that something more than buying by investors was at work in the Stock Exchanges. On one stock after another, a buying movement would converge which seemed to be utterly indifferent to prices, and which was accompanied by trading of quite unexampled volume. It was presently evident that what was going on was the purchase, at extravagant prices, of a controlling interest in the shares of railway and industrial companies. The public inferred, from what it saw, that these purchases were being made on their own account by men of boundless wealth, who were merely investing their private capital. Such a supposition naturally drew the investing public into the whirl of speculation: first, in order to make its own investments before prices should go beyond its reach; second, in the hope of selling out at the much higher prices which the rich men's purchases were expected to bring about.

But the public was wholly mistaken as to the nature of the movement. What actually was happening was this. People connected with one corporation would borrow large sums of money, and use that money to buy up shares of another subsidiary or competing corporation. They were buying, however, not for themselves, but for the company with which they were identified; and their purpose was, as soon as the property had been obtained, to hand it over, issue new stock or bonds of their own corporation, sell such securities to the public, and use the proceeds to reimburse themselves, with a handsome bonus. There was the famous case, for instance, of the Chicago, Burlington & Quincy Railway. This company's stock, amounting to $110,000,000, sold at the end of 1900 for $144 per share, which was considered by most people rather high. People identified with the Northern Pacific Railway bought up the stock at a seemingly reckless rate, pushed up its price above $180, and then announced that a bond would be issued by the Northern Pacific & Great Northern Companies to pay $200 a share for the whole of the Burlington stock. These bonds were later sold on the open market, the result, of course, being that the supply of securities on the market was increased by some $50,000,000. The same process occurred in half a dozen other railways, the usual expedient being the issue of what was now called a "collateral trust bond." This convenient instrument was really a very simple thing. Stock of another company—sometimes all of it, sometimes a bare majority—was bought for a corporation. That corporation thereupon issued bonds for the cost of purchase; but those bonds, instead of being, like other mortgage issues, a lien on the franchise and road-bed of the issuing company, were merely secured by pledge of the stock which had been bought.

When it was found that the public readily bought these

bonds, the device was followed by another, not altogether new, but never before applied on such a scale. A company would be chartered for no definite purpose except to hold the shares of other companies. Having bought up these shares or acquired them through exchange, it issued its own stock to foot the bill. The public bought this stock, as it had bought the collateral trust bonds, and there seemed no limit to the scope of the operation. It was then that Mr. Morgan, during March, 1901, formed his "billion-dollar steel trust." That was a "holding company," which gained possession of the whole share capital of ten other huge combinations in the trade, and issued its own great mass of stock to pay for it. Perhaps the climax of this movement was attained when a group of promoters, having sold out their own properties at an enormous profit to the steel trust, used the proceeds, along with certain heavy borrowings, to buy control of the $75,000,000 stock of the Rock Island Railway. To keep control of this, they had to continue borrowing from their bank,—an expedient which was awkward and not wholly safe. What these ingenious people did then was to organize a Rock Island holding company, which issued $75,000,000 collateral trust bonds and $117,000,000 stock. The bonds were used by the promoters to buy up the railway stock in their own possession. As bondholders do not elect a management, control of the railway now rested in the shares of the holding company which had issued the bonds. To make the job complete, it was provided that virtually only the preferred stock, which was less than half of the $117,000,000 issue, should have a voting right. Thus, in exchange for their old Rock Island Railway stock, which they dared not sell, these gentlemen received 100 per cent. in bonds, which they did not need to keep, and about 150 per cent. in new stock, of which more than half could safely be sold without losing control of

the property. But here, too, it will be observed, the investing public was deluged with new securities.

In short, this whole procedure amounted simply to inflating enormously the supply of stocks and bonds offered to the investing public, without any increase whatever in the real property behind them. The promoters of these enterprises were not so foolish, even in those times of financial mania, as to neglect precautions against the possible gorging of the public's appetite. It was dangerous even for a millionaire to make such purchases on his own account when he might not be able to sell the new securities given him in exchange. Early in 1901, therefore, began the formation of "underwriting syndicates," composed of numerous strong financial men and institutions, who guaranteed the sale of the new stocks and bonds, contracting to take the securities themselves if the public would not take them. The arrangement was not new. Such syndicates had long been formed, even in case of bond issues by governments. But it was a pure inflation scheme, to support which the syndicates of 1901 were formed. Therefore, very large inducements had to be offered. The syndicate formed in 1901 by Mr. Morgan, to guarantee the sale of that part of the billion-dollar steel trust capital which went to the general public, contributed $25,000,000 cash. A year later it received back in cash all of its contribution, with 200 per cent. additional. Nothing could be imagined better fitted to whet the promoter's and speculator's appetite.

The speculating public, to begin with, lost all restraint. A stream of excited customers, of every description, brought their money down to Wall Street, and spent their days in offices near the Stock Exchange. Two or three years before, it was called a good day's business when 400,000 shares of stock changed hands on the exchange. In April, 1901, the daily record rose to a million shares,

to two million, and finally to three million and a quarter. Estimating the average price of stocks at that period at $60 per share,—an inside figure,—you will see that the 3,200,000 shares of April 20 meant that from some quarter $192,000,000 worth of stocks were bought. The newspapers were full of stories of hotel waiters, clerks in business offices, even doorkeepers and dressmakers, who had won considerable fortunes in their speculations. The effect on the public mind may be imagined.

While the rise in prices had this effect on the general public, promoters with stocks of new enterprises to float were equally spurred to inflation. The phrase, "thinking in hundred millions," which had its origin in that period, fairly described the state of things. I happened at the time to know personally of one undertaking which its promoters wished to float with a capital of $750,000. The banking house to whom they applied advised them to make the capital two millions, and they did so. Bankers in high standing asked and received commissions as high as five million dollars for managing some of these operations, and still the original proprietors who sold out to the combinations received prices of which they had never previously dreamed. There were scores of instances, but perhaps the most remarkable was one which occurred when the craze was at its height,—the effort to buy up and combine into an American corporation all the important steamship lines running between England and this country. When control of such old English enterprises as the White Star and Leyland lines was secured, partly for cash and partly through the $112,000,000 stock and $50,000,000 bonds of the International Mercantile Marine, an angry outcry arose in England. But the chairman, at the ensuing annual meeting of the Leyland Company, flatly told the shareholders that the offer made was so high that no stockholder had a right to refuse it. As a

matter of fact, every one familiar with ocean navigation business now admits that the price at which these companies were acquired was absolutely senseless.

A movement based on such inflation of values is certain, sooner or later, to break down. It has two inevitable pitfalls in its way. One is encountered when the limit is reached of the investing public's purchasing power; the other, when borrowings for such purposes have so far strained the resources of the money market that the banks can lend no more. The public's buying capacity had been pretty severely strained already; but, as we have seen, the danger of collapse from that quarter was guarded against by employing powerful syndicates who contracted to take such of the new securities as the public rejected. Part of the money pledged by these syndicates was capital in the hands of deposit institutions, and contributed by those institutions as direct subscribers to the "deal," including, I am sorry to say, the funds of some life insurance companies. The rest of the syndicate money was borrowed. What perplexed such observers as retained their senses, and who knew that these syndicates were borrowing, was the absence of any sign of serious strain on the resources of the banks. The reason was discovered later on. A great part of the capital needed to pursue these promoting schemes was raised in Europe, on the credit of international banking houses. I have previously shown that at the end of 1900 this country's "foreign credit balance," as a result of its remarkable export trade, was estimated at not less than $200,000,000. By the middle of 1901 it was figured out by competent experts that not only had this great credit been entirely wiped out by the drafts of our banking houses, but that a floating debt to Europe, footing up nearly as much, had been created. Our bankers had, in fact, borrowed heavily in London, Paris, Berlin, Amsterdam, and even in the poorer Euro-

pean markets, like Vienna. Clearly, then, the whole situation depended upon the attitude of these European lenders.

We have already noticed the operation by which the Chicago, Burlington & Quincy Railway was bought up by the Northern Pacific and the Great Northern. Now the Burlington was more useful as a feeder and more dangerous as a competitor to the Union Pacific Railway than to either of these two buyers. The Union Pacific asked to participate in the Burlington purchase, but the request was refused. What the Union Pacific then did was to start in quietly to buy control of the Northern Pacific itself. The existing Northern Pacific interests discovered this movement, and a very extraordinary episode ensued. Behind the Northern Pacific itself stood the Morgan interest, whose prestige was then at the highest point ever reached by a banking house. Behind the Union Pacific stood the Rockefeller interest, comprising undoubtedly the most powerful aggregation of capital in this country. Neither held a majority of the Northern Pacific shares. Both undertook to buy such control on the open market. As their bids in this contest rose from $110 to above $200, speculators sold them Northern Pacific stock, expecting to get it elsewhere for delivery. There came a day—May 9, 1901—when the market discovered that contracts had been made to deliver more stock than was in existence, except in the hands of the two competing bidders. The stock, in other words, was cornered. Failure to deliver meant either payment next day of any price the buyer chose to exact as the terms of release or bankruptcy, of the seller. By this sudden freak of fortune, the logical outcome of the extravagant buying movement, every one lost confidence in values. Brokers caught in the Northern Pacific corner hurriedly threw over their other stocks to raise cash to protect themselves; and, while

the price of Northern Pacific rose to $1,000 per share, prices on the rest of the market went down in a general collapse.

The "Northern Pacific corner" was really the end of the public's great speculation, not because general ruin followed that episode, but because the shock broke the spell of the long illusion. If the end had not come in that way, it would have come in some other, the best proof of which is the now well-known fact that European banking houses which had loaned this mass of capital to the New York market were beginning to call it back. The manager of one of the largest Paris banking houses told me, some months later, that they stopped their American loans when the news of the purchase of English lines for the shipping trust was learned. In London it was a rather open secret that the Bank of England called a meeting of the London bankers to warn them against increasing their holdings of American paper. This was equivalent to notifying them to reduce such holdings, and reduction was the order of the day during many months after the May 9 panic.

What followed is very recent history. The American market had on its side, when confronted with this heavy drain on its resources, one element of great strength,—the really great and growing prosperity of the country. It had against it one element of great weakness,—the fact of over-capitalization of new corporations and the existence of underwriting syndicates, holding with borrowed money masses of stock which the investing public would no longer buy. Our financial history since the spring of 1901 has been governed alternately by these two influences. The one made possible so quick a recovery from the panic of May 9 that neither the murder of President McKinley in the ensuing summer nor the failure of the autumn corn crop seemed to shake the situation. What did break down

the financial structure was the gradual recall of this foreign capital, as the loans matured. To pay back the debt to Europe, new loans had to be raised from domestic banks. The raising of these loans made the position of the syndicates still harder. Finally, at the end of 1902 the banks began to force a settlement. The underwriters were plainly caught in a trap. The stocks which they held had for some time been popularly known as "undigested securities," which showed that the public understood the situation. A little later on it was James J. Hill, the author of the "Burlington deal," who suggested the term of "indigestible securities." The syndicates began by selling their reserve investments of older high-grade stocks and bonds, and the market broke under their sales. Some of these syndicates, fairly forced to the wall, next threw on the market the underwritten securities, to get what they could get for them.

They got very little, for along with this heavy selling came news most disquieting to investors. The hastily capitalized industrial corporations themselves began to raise signals of distress. For one thing their organizers had calculated that the amalgamated concerns could themselves, when they needed working capital, procure it from the banks, as the individual manufacturers had done before. They were, however, wholly mistaken, having quite overlooked the fact that discount of one manufacturer's paper by a neighboring bank, familiar with his character, history, and business methods, is a very different matter from discounting the paper of a company formed through buying out ten such manufacturers. This new concern must ask for ten times as much on its individual note, and it must do so when its character remains to be determined, when its history has just begun, and when its methods are either unknown or actually (as was the case with more than one new "industrial" in

1903) open to grave suspicion. But, even had these new concerns been most unexceptionable borrowers, the banks, with the European repayments and the syndicate loans upon their hands, were in no condition to oblige them. Some of the combinations, like the New England Cotton Yarn, which had been paying 7 per cent, dividends, called a cash assessment from their shareholders. The great steel corporation stopped dividends on its common stock, which had been paid since the company was organized.

Other smaller combinations followed its example. The Consolidated Lake Superior, a $100,000,000 iron trade combination, which had also been paying 7 per cent., went suddenly into bankruptcy. The United States Shipbuilding Company, which sold its bonds on the assurance that foreign investors were buying both them and its $50,000,000 stock, was placed in the hands of receivers, with an exposure of humbug which was little less than farcical. Its promoters had never even approached great foreign bankers, but had been dealing with needy adventurers around the *Bourse* who had not the money to buy a ship. What the investing public did, in the face of these developments, was simply to withdraw from the market. The real distress fell upon other quarters. It was appropriately called "the rich man's panic."

But it spent its force. It was not a panic in the old-fashioned sense, because neither the banks nor the general public were in a dangerous position. There were very few failures during 1903, even on the Stock Exchange, and none was of the first importance. The half-dozen bank suspensions occurred only in cases where sound banking principles had been flagrantly violated by weaker institutions. On the other hand, the reaction did not stop with the collapse in Wall Street. It left its marks in other places than the Stock Exchange, and there were two or three months when the Eastern markets indulged in

a really serious trade reaction. We have seen how the steel and iron trade in particular, during the prosperous days of 1901, was helped by the public's attitude towards new securities. Investors bought the new stocks and bonds of railway companies. The companies spent the proceeds for construction material. The result was the great demand on the iron industry. All this was now changed in the twinkling of an eye. The public, frightened by the sacrifice sales of their holdings during 1903, by the underwriting syndicates, and equally disquieted by the scandals which came to light in industrial finance, by the decreased earnings of the railways, and by the violent fall in stock exchange prices, refused to take any new securities. The Pennsylvania Railway, a company in the very highest credit, offered $75,000,000 of new stock to its shareholders in 1903, and fixed the price at $120 a share, when the old stock was selling in Wall Street at $157. Subscriptions were so small that the company had to employ a costly underwriting syndicate to save the operation from failure, and the old stock actually fell below the issue price fixed for the new. At the same time the billion-dollar steel corporation offered $50,000,000 5 per cent. bonds to its shareholders at par. The shareholders did not subscribe a dollar. A syndicate had to take the entire issue, and the price of the new bonds on the stock market subsequently fell below $70. So suddenly did the market for the new securities close down that a dozen large railway companies were left with expensive outstanding contracts for improvements, money for which they had to raise by borrowing on temporary notes, at exorbitant rates of interest, in the foreign markets.

It was easy enough to see in this action of the markets the penalty for the wild financial excesses of 1901. But the public's attitude involved something more than a fall

in stock exchange prices. If the railway companies could not raise money from investors to pay for new construction, they could not spend it. Building enterprises, which had absorbed unusual quantities of structural steel, were in the same predicament. The result was a fall in the price of iron, which had been $29.50 per ton in 1899 and $24.25 even in April, 1903, to $15 before that year was over. In many cases, profits of manufacturing companies were cut in two, and the East believed the country to be in the toils of a serious trade reaction.

And so it would have been, had our main dependence, as a support for the structure of paper credits piled up in the investment markets, been our manufacturing industry alone. These inflated enterprises had a heavy reckoning. Its extent may be judged by the fact that the market's valuation of the billion-dollar steel trust's shares, which was $785,000,000 in 1901, actually fell to $350,000,000 in 1903. Fortunately, the country had other sources of wealth to rely on, and they did not fail it in this emergency. The peculiar position of the world in general, and of this country in particular, in regard to agricultural production and consumption, was as marked in 1904 as in 1897. We have not, it is true, raised as much wheat within one hundred million bushels as the country could have sold to Europe. But directly on the heels of a world-wide cotton famine, raising cotton prices to heights not reached in thirty years, has come the largest cotton crop in our history. The resultant great wealth has poured into the South, while a profitable market for corn and wheat has continued to enrich the West. This new industrial windfall is already reversing the country's financial situation, which proves sufficiently what I said to begin with, that the real key to the American trade revival is the fact that the world's consumption of such products has gone on increasing faster than production.

The result of this new turn in the situation since the harvests of 1904 is seen in the rapid recovery in the volume of bank exchanges, in the great advance of stock exchange prices since last July, perhaps even in Mr. Roosevelt's remarkable majorities; for prosperity always inures at voting time to the benefit of the powers that be. Thus we have again before us the highly interesting problem of what our country, highly favored by nature and by the circumstance of the day, will yet achieve in its industrial development, on a more sane and normal basis.

This is the interesting problem of the future. It will not be solved by such wild "over-discounting" as occurred in the financial markets of 1904, with its rather extraordinary sequel in December; and, in fact, experience gives little ground for expecting another industrial boom on the scale of 1901. Certain contributory conditions of that movement—such as the drastic economies of American production, the low price of our raw material, and the insatiable demand of Europe for all our products—exist no longer. Even our wheat and flour exports, whose rise to 234,700,000 bushels in quantity and $215,000,000 in value during the fiscal year 1898 had much to do with our powerful showing on international exchange, fell in the fiscal year 1904 to 120,700,000 bushels, valued at $104,800,000, and in the past few months have declined to the smallest figure reached in thirty years. Nor is this a consequence of so temporary a matter as a single short-crop year. On the contrary, recent crops would have been called abundant five or six years ago, the influences now at work in reducing exports being the actual overtaking of home production by home consumption, except in years of abnormally large yield. This certainly does not indicate or foreshadow anything in the nature of calamity; but, like many other present phenomena, it shows that the particular causes of the great boom of

1899 and 1900 are not at hand to-day. As against this general conclusion, however, stand the important facts that American finance is at bottom sound, the American community is genuinely prosperous, and that the consuming world's demand for the commodities which we, beyond any other nation, produce is fairly at high-water mark.

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FETTER'S THEORY OF VALUE.

I.

AMONG those who of late have been attempting to give consistency to the main body of economic principles, Professor F. A. Fetter occupies a unique position. Most of those who have felt the lack of harmony among the different elements of current economic doctrine, and who have not in despair abandoned theoretical discussion, have sought for consistency in the eclectic union of the Austrian doctrines with the older classical theory. The cry has been that the Austrians went too far in the direction of a purely psychic explanation of economic phenomena in terms of utility, and that the whole truth in regard to value must now be sought in a return towards the objective cost explanation of the older economists.

With this conception of the situation Professor Fetter has taken direct issue. A decade of critical reading and positive thought appears to have brought him to the point of view that the Austrians were, after all, on the way towards a true and consistent interpretation of economic activity. They failed in this, not because they had departed too far from the classical preconceptions, but because they could not wholly emancipate themselves from the older economic notions. With the fabric of their unique thought well on towards successful completion, they destroyed its consistency by weaving into it elements from the classical theory.

Imbued with this idea, Professor Fetter has considered it wise to take up again the initial conceptions of the Austrians, and to attempt to push their characteristic line of thought to its just and ultimate conclusions. In harmony with them, he has, therefore, looked upon economics as

essentially the study of value, and has viewed all economic phenomena as the concrete expression, under varied circumstances, of one uniform theory of value. He has attempted to carry through to success the Austrian search after a uniform measure for estimating the value of commodities and the means of production, and to attain the Austrian ideal of bridging over the gap between the theory of value and the theory of distribution. His work, none the less, bears the stamp of independent and positive thought. Starting from certain fundamental value conceptions, which merely happen to be Austrian, he has made the whole theory of economics to appear as an ever-widening application of these conceptions to the explanation of economic phenomena,—each successive explanation resting upon its predecessor, all forming one complex expression of a single value concept, the final result being but the logical development of the first simple premises.[1]

II.

The interpretation of Professor Fetter's work must begin with the exposition of his fundamental notions in regard to value and value determinants. If we analyze the structure which he has reared, we find that it rests upon these four fundamental concepts: (1) psychic Income, (2) diminishing marginal utility, (3) diminishing returns, and (4) what for want of a better term he has called Time Value. It will be well to consider each of these notions briefly.

1. *Psychic Income.*—This is the central and vital con-

[1] In this paper no attempt is made to follow the order of exposition found in Professor Fetter's recently published *Principles of Economics* (New York: The Century Company, 1904), nor to confine the discussion to points specifically treated therein. Several important features of the theory which here receive emphasis appear only by implication in the text. It is Professor Fetter's theory, not his book, which is under discussion. Moreover, the analytical character of this paper must not lead the reader to assume that Professor Fetter's method is "deductive" as opposed to "inductive."

cept in the theory of value which we are discussing. The meaning of the phrase and the proof of its essential significance can be given in a few words. All are agreed that value rests ultimately on usefulness. Usefulness consists in the power of gratifying human wants. But the gratification of wants is a psychic phenomenon. Value, therefore, rests on feeling; is psychic in its origin. And all those things and actions which are felt to have some causal relation to gratifications have value to man. Further, durable goods, which may be looked upon as the objective source of psychic incomes, have a value which is simply the totality of their uses, or incomes. The value of all goods, therefore, rests upon the fact that they yield incomes measured in psychic terms. In brief, then, psychic income is the sole source or basis of value. Simple and axiomatic as this proposition appears, much that is erroneous in the discussion of the more complex problems of value has come from failing to hold to it.

Psychic income being the source or basis of value, we have to ask the question, According to what laws do goods yield their psychic income? The answer to this question is found in the three remaining fundamental concepts of Professor Fetter's theory.

2. *Diminishing Marginal Utility*.—The law of marginal utility as announced by the Austrian economists has become the common property of economic students. Professor Fetter's conception of it does not differ essentially from that currently held, nor does he depart from Austrian precedent in the use which he makes of it in the solution of the value problem. It will suffice at this point, therefore, merely to state the law as it has been formulated by him: "As the amount of any good increases, after a certain point the gratification that the added portions afford decreases."

3. *Diminishing Returns*.—The familiar law of diminish-

ing returns receives a new formulation and a wider application at the hands of Professor Fetter. He departs from English and Austrian precedent, taking a position more nearly like that of Professor Clark and other recent American critics of the orthodox position. All permanent goods whatsoever, according to his view, yield their fruits or uses subject to the law of diminishing returns; and he characterizes the orthodox distinction between land and other use-bearers, based on the supposition that land alone is subject to this law, as the outgrowth of peculiar industrial and social conditions of the Middle Ages, as an historical distinction without logical foundation.

The argument in proof of the universal applicability of the law of diminishing returns is not unfamiliar. It may be well, however, to state it briefly.

An income series is never actually derived from one productive factor, but always from a combination of factors. But in any field of industry there is always a best possible adjustment of industrial forces,—an adjustment in every industrial unit which yields the maximum product for a given outlay; a point where the addition of further portions of any single factor will indeed increase the yield, but at a diminishing rate compared with the outlay. That is, the law of diminishing returns applies to every combination of productive forces. However, if we are bound to impute a portion of the yield from any combination of industrial forces to a single factor, it is not difficult to show that no general reason exists for imputing diminishing returns to one factor rather than to any other. The factor to which the return is imputed in any combination is always the fixed one. (Compare the orthodox statement of the law of diminishing returns.) But in any industrial unit,—a cotton-mill, for example,—if we suppose each factor in turn to be fixed while the others increase, it is readily seen that diminishing returns must be im-

puted to each in succession. If machinery, for example, be taken as the fixed unit, a point will be reached where further additions of labor, materials, and land, will result in a diminishing return per unit of outlay. The law of diminishing returns, therefore, is of universal application.

4. *Time Value.*—It has been generally recognized that only in the simplest cases is valuation a process of comparison of gratifications equi-distant in time from the evaluating subject. The significance of this fact was not understood by the older economic writers. Of late, however, a growing conviction has appeared that time is of the essence of the more complex value problems. Professor Fetter has attempted to give systematic, scientific expression to this conviction. Throughout his discussion of value he proceeds on the assumption that it is a universal law of the human constitution that the postponement of gratifications decreases the estimate which is placed upon their extent. For example, quite apart from the risk involved, no one derives the same prospective gratification from the yield of an income-bearer ten years hence as from the yield of the current year. No one, therefore, will place a present value upon the prospective yield equal to the value of the same objective yield in hand. The significance of this fact is plain. All economic goods are valued for the psychic incomes wrapped up in them. The value which is placed upon the possession or use of goods, therefore, varies not merely with the objective amount of their derivative incomes, but with the time at which the incomes are available to the valuer. In short, every man discounts future psychic incomes to their present worth, and, therefore, time value, or the difference in present worth of the same income at two different periods of time, is an essential factor in determining the value of goods under all but the simplest circumstances.

III.

With the aid of these fundamental concepts let us follow Professor Fetter in his solution of the universal problem of value as it unfolds itself to the individual and in the history of industrial society. The earliest and simplest conception of value arises in connection with the immediate gratification of wants. Value is first attributed or imputed to present income or to goods which are capable of yielding their entire income at any specified time, as, for example, the food supply of the primitive hunter or fisher. The first economic problem, then, is the valuation of immediately consumable or consumption goods, on the basis of which must be built up the value of indirect or productive agents.

What, then, determines the value attached to consumption goods? Obviously, the valuation of a good is merely the mode of expressing the importance of the thing to the welfare of the valuer. Logically and historically, the value of consumption goods first appears as an individual subjective estimate, attached to the gratifications afforded by them. The first assumption, therefore, would be that the estimate of value coincides with the capacity of the goods for gratifying wants. This, however, is not the case. The individual attaches no value to a good until he feels that the gratification of some want is actually dependent upon the good. That is, the subjective value of the good is measured by the felt dependence of the individual upon it for some specific want gratification. Now this felt dependence is measured by the loss of want gratification which the individual would suffer if he were deprived of the unit of the good in question, and this loss would obviously be the least, or marginal, want gratification which any unit of the good would be used to supply. In brief,

then, the individual will measure the value of the good by its marginal use or utility. This is the immediate explanation of subjective valuation.

But what determines the marginal utility of the good by which its subjective value is measured? Unquestionably, the marginal utility is determined by scarcity, in conjunction with the law of diminishing marginal utilities. According to the law of marginal utilities, added units of a good, after a certain point is reached, afford to the individual a constantly diminishing quantum of gratification. Any good in relation to any subject has a want-gratifying or demand schedule, which may be represented graphically by a utility curve which descends as the number of units of the good increases. The marginal utility or value of the good will then be the point on this curve which represents the utility of the last unit of good available for use. This point upon the utility curve is obviously fixed by the relative scarcity of the good. The subjective value, then, in the first instance is determined by marginal utility, and marginal utility in turn by the law of diminishing utility and by scarcity. In this explanation there is, of course, nothing novel. We have merely arrived at the familiar conclusions of the Austrians.

The second step in the solution of the value problem is from subjective to objective exchange value or market price. Once the problem of subjective valuation is solved, this step involves no serious difficulty. Market price rests on, and is determined by, subjective valuations. It does not go for its explanation behind these valuations; but, in assuming them in the market, it assumes the conditions of utility and scarcity, or utility and cost, which underlie them. The simple problem of market values, then, is how, on the basis of varying subjective valuations, a single market price is attained. On the solution of this problem we need not dwell. It has been made familiar

to every student of economics through the work of the Austrian school. It will be sufficient here to emphasize the fact often overlooked, that, although the competitors in the market consider only questions of utility,—the utility of the good to be sacrificed and the utility of the good to be acquired,—it is a mistake to affirm that the solution is one-sided, taking into consideration only the utility or demand side of the problem. Cost is not ignored: it merely plays its part earlier in the drama in helping, through the element of relative scarcity, to determine what subjective estimates shall be in the market, as the basis of the market process. The relation of cost to value, however, will be more fully discussed in a later portion of this paper.

It is at this point that Professor Fetter breaks distinctly and finally with the Austrian economists, for it is here that they wavered, and, instead of pushing on to the ultimate conclusions demanded by these premises, returned to the classical notions of Rent, Capital, and Interest,—notions altogether inconsistent with the theory thus far developed. From this point, therefore, the theory under consideration proceeds along independent lines.

We have solved, then, according to Professor Fetter's view, the primitive problem of value,—the value of immediately consumable goods. But, in doing this, we have already accomplished more. This will be seen by considering the real place of consumption goods in the industrial process. They are, in fact, income immediately derived from other and relatively permanent goods or from personal services. They are the momently appearing fruits of indirect or productive agents, given to us sometimes in the form of the material bearers of gratifications and sometimes more directly in the form of gratifications themselves, but in either case measured by the psychic income they represent. Such fruits, when derived from produc-

tive agents or factors in the utilization of which the law of diminishing returns is encountered, have always been termed by both practical men and economists "rents." But we have seen that Professor Fetter regards diminishing returns as a universal productive phenomenon. Then all consumption goods, in their character of immediate fruits, or incomes, from relatively permanent agents of production, are in the nature of rents. In brief, rent is a universal productive phenomenon: "it is the value of the usufruct as distinguished from the value of the use-bearer, or thing itself." Our discussion of the value of consumption goods has then brought us logically to the third historical step in the solution of the universal value problem, —the value of the rent, or usufruct, of permanent productive agents.

At first blush the rent problem might appear to be solved, so far as economics is concerned, in the determination of the value of the rent units; *i.e.*, consumption goods. But the rent problem is not so simple as this. It is complicated by the fact that no agent of production independently yields rents, but economic fruits are always the result of the co-operation of two or more productive agents. Our problem, then, requires us to determine the immediate fruits to be attributed to a productive agent. This is called by Wieser the problem of imputation. The solution of this problem has been made comparatively familiar to American readers by such men as Professor Clark. Therefore, the briefest statement of it will answer the purposes of this paper.

It is conceived that in any given condition of industry there is always a least economic use to which a productive agent can be put. There is, economically speaking, a marginal use for the agent. Now all along the line of industrial effort it is supposed that an agent will be utilized down to this margin. By the time-honored "dose"

method, so familiar to students of classical economics, the productivity, or rent, of the agent on the margin of utilization can be determined. But, economically speaking, this marginal rent, or productivity, must be the value of the rent of any unit of the agent. For since, if any unit of the agent were lost, the unit at the margin would be substituted in its place, and thus only the marginal product would be lost, the felt dependence upon any unit of the agent will be the extent of its marginal product. All indirect or productive goods, then, yield rent; and the economic rent of any agent of production is equal to the value of its marginal fruits,—in brief, to its marginal productivity.[1]

This solution of the rent problem carries with it by implication the general solution of the problems of wages and profits. Wages and profits are, like rents, the usufruct of relatively permanent agents of production. The sole logical distinction between them is derived from a distinction between the nature of different productive agents. By common consent these have been divided into two general classes, material goods and personal services. And custom has dictated that the term "rent" should be applied to the immediate fruits of material agents, and the term "wages and profits" to the immediate fruits of personal services. Professor Fetter has retained this distinction because of a desire to emphasize the modern conception of man as primarily the end of the economic process rather than, as in the older view, merely an agent in the productive process carried on by the employing class. But, if our analysis of the economic problem is correct thus far, rent and wages are but two species of one genus,—immediate income, or usufruct,—and must, as such, have their value governed by one general law.

[1] In this solution of the problem all non-substitutable grades of agents must of course be reckoned as different agents. The rent of the different grades will be measured up from the rent of the marginal grade.

Economic wages, like economic rents, are the product of the marginal unit of the agent, or, in brief, are determined by marginal productivity.[1] As profits must be regarded as the income from a special grade of personal service, they are obviously determined by the same general law.

We have now solved in all its essential bearings the problem of the value of the fruits yielded by productive agents. We assumed in the beginning that goods have value only in so far as they yield incomes—gratifications—or are seen to be essential to the yielding of psychic incomes. It is obvious, then, that the value of indirect or production goods is derived solely from the value of the consumption goods which they yield or to the yielding of which they are necessary. From the value of the fruits, or incomes, to the value of the use, or income-bearer, is, therefore, the next logical step in the solution of the general value problem. This is the problem of capitalization.

Here, again, Professor Fetter is altogether at odds with the Austrians. Böhm-Bawerk, indeed, saw that capital value was a sum of income values, but he failed to make use of this fact. Many times he almost brushed against the correct theory of capitalization, but each time he turned aside, seemingly blinded by precedent. Professor Fetter takes up the line of thought abandoned by the Austrians, and pushes it independently to its just conclusions. Let us follow him, then, carefully in his solution, first, of the problem of capitalization, and then of the related problem of interest.

Capitalization is the process by which a valuation is placed upon a relatively permanent economic good, or bearer of uses. Or, more broadly, it is the determination of the value of a series of prospective incomes. The essential conditions of this problem, as will be apparent

[1] Space forbids the extension of the argument to the discussion of the distinction between economic rent and wages and contract rent and wages. In regard to these matters there is nothing novel in Professor Fetter's work.

to any one who has followed closely the reasoning thus far, are three: (1) the value of the capital good is derived from the value of the fruits, or incomes, wrapped up in it; (2) these fruits, or incomes, are ultimately psychic in their nature; and (3) these psychic incomes on which rests the capital value of the permanent good are not present, but prospective. In essence, then, the problem of capitalization is the determination of the present worth of a series of prospective psychic incomes. Here is introduced into the theory of value the fourth of Professor Fetter's fundamental concepts,—the concept of time value,—the term applied to denote the difference in value attributed to a thing at two points of time as judged by the valuing subject from the same moment.

The discounting of future incomes, or gratifications, for time is a universal psychological phenomenon. To no man does the gratification of any want at a future time appear to be as important as its gratification immediately, provided, of course, that all other circumstances are identical. Different individuals discount the future at different rates, but all do discount future gratifications; and, therefore, all do attach a smaller present value to future incomes than to the same incomes in hand. It follows that the present value of a series of incomes stretching over the future is the discounted sum of the incomes. And since, as we have said, the value of any permanent good is derived solely from the series of incomes that it yields, its capital value is the sum of its anticipated incomes, or rents, discounted to their present worth.

The process of capitalization thus described has its subjective and its objective exchange aspects. Each individual on the basis of the rents that he anticipates from it, and on the basis of his own individual discount rate, fixes for himself the value of any given (capital) good. On the basis of the varying subjective valuations of the

individuals in the market, the objective exchange value of each (capital) good is determined by the same process as that which operates to determine the market price of consumption goods. All permanent goods, or use-bearers, whose value is determined in this manner, are (capital) goods. The terminology is consistent with the untechnical language of the market, and is historically tenable. And since all permanent goods, or use-bearers, whatever have their value actually fixed in this manner, the term "capital" is rightly applied without distinction to all productive agents.

We have now shown an unbroken chain of causation extending from the primitive economic problem—the subjective valuation of immediately consumable goods—through rent to the capital value of relatively permanent goods, or productive agents. To make the sequence complete as an interpretation in terms of value of the economic world, we have to solve one problem more,—the problem of interest. Interest is a contractual payment for a money loan as a means of securing the use of goods. This being the case, logically and historically, the interest problem can only arise subsequent to the process of capitalization. What, then, is its nature?

As stated earlier, there has appeared of late a growing conviction that time is of the essence of the problem of interest. The transaction out of which interest arises, as it typically appears, is the giving up of a capital sum for a term of months or years, at the end of which term the same capital sum is returned. Since a capital sum represents any goods in the market of equal value, this transaction involves on the part of the lender a postponement of a sum of psychic incomes—gratifications—from a present to a definite future date. To the borrower, on the other hand, the transaction gives a sum of present enjoyments in exchange for the same sum at a future date. To be

sure, the lender might not have actually made use of the capital sum for present consumption purposes, and the borrower may not make this use of the sum obtained; but the essential thing is that the lender has definitely foregone the possible present uses of his capital, and the borrower has obtained present control of it.

But now we have seen that the postponement of gratifications lessens them in prospect; *i.e.*, all future gratifications are discounted for time, in the mind of man, to their present worth. To both the lender and the borrower, then, the incomes, the gratifications wrapped up in the capital value, represent a less subjective value prospectively, at the end of the loan period, than at the moment of loaning. On account, then, of the presence of a time element in the transaction, the simple return of the capital sum in the future is not deemed an equivalent for the present grant of it. The lender will demand a premium for foregoing present control of the incomes represented by the capital sum, and the borrower will be willing to pay a premium for their present control. This premium reckoned as a percentage of the capital sum loaned is the interest charge.

Interest, then, arises from the difference between the present worth of the same capital sum, or series of gratifications, at two different periods. It results from the fact that the future uses in the goods purchased, in common with those of all other goods, have already been discounted in their price. It is a subsequent aspect of a series of time discounts wrapped up in the capital good. In other words, it is a contractual payment for the postponement of the present enjoyments represented by a capital sum, and it arises out of a psychological fact,—the fact that postponed gratifications are lessened in prospect. Or, again, it is the market expression of the varying rates at which future enjoyments have been

discounted to their present worth in the process of capitalization.

We reach, then, an explanation of interest on the basis of the fundamental principles already laid down. No new element has been introduced. Interest appears simply as a further harmonious unfolding of the law of value,—a final application of this law to the facts of industrial life.

IV.

It may be well now to consider very briefly certain criticisms that have been advanced against this theory. It has been said (1) that it takes no account of cost as an essential and independent determinant of value; (2) that it is erroneous to attribute rent to all productive agents, since land and capital are in no wise taxonomically identical; (3) that the theory of interest here advanced leaves no place for the well-known effect of productivity upon income; and (4) that interest and rent are here practically identified. We shall consider these objections in order.

1. The justice of the statement that Professor Fetter takes no account of cost as an essential and independent determinant of value depends entirely on what is meant by cost. If the critics refer to money cost, he cannot and would not wish to deny their allegation. In harmony with the Austrians he regards money cost as reflected back from the value of the finished product. It coincides with the value of the product indeed, but because it is determined by that value. If, however, the critics refer to psychic cost, the pain and sacrifice involved in the production of goods, they will find on closer inspection that Professor Fetter's theory makes cost practically co-ordinate with utility as an independent determinant of value.[1]

[1] It is true that Professor Fetter has not formally presented in any of his published writings this explanation of the relationship between cost and value. Yet this relationship is clearly implied at various points in his recently published book, and has been frequently presented by him to his seminary. For the particular formulation here given, however, the writer of the present article is responsible.

It will be remembered that objective exchange value, or market price, rests upon subjective value. Subjective value coincides with marginal utility, while marginal utility is determined by two factors, the law of diminishing utility and scarcity. Given the utility, or demand schedule, of a commodity, and it is evident that its value will be determined by scarcity. What, then, determines scarcity? Here we introduce into the problem of value the element of cost.

Economic goods, the means of gratifying wants, must be sought by man in nature,—in his objective environment. When goods are scarce, it means that nature yields them grudgingly relative to human wants. To secure these goods in amounts commensurate with wants, man must manipulate his natural environment. To secure gratifications, he must devote his time to contriving how to make nature more fruitful. He must put forth muscular exertion. He must bring together and dedicate to the production of the gratifications desired other goods, other want-gratifiers. All this involves negative gratification, or psychic cost. For, while thought and effort are at times themselves immediate sources of gratification, they become, when strenuous or long continued, irksome and painful. Thus it may be said that all production of economic goods—psychic income—involves sacrifice, psychic cost. How, then, does this cost affect value?

We have seen that the psychic income afforded by any good is governed by the universal law of diminishing utility. We now see that the psychic cost involved in acquiring any good, in general, obeys the law of diminishing returns. We know, moreover, that it is man's nature to produce goods so long as the utility secured in the last unit is greater than the cost involved. The amount of any good, then, will, in general, be determined by the action of the two laws, diminishing utility and diminish-

ing returns. Each added unit of any good produced will have a lower use and, therefore, a lower utility, while, after a certain point is reached, each added unit will be produced at greater sacrifice, or cost. The cost and utility will then gradually approach until a point is reached where the production of a further unit would not afford utilities greater than the disutilities, or cost, involved. Here production will cease, and this point of balancing of utility and cost will determine the scarcity of the good in question. Moreover, we know that man seeks the greatest utility for the least cost. He will therefore, at any moment, produce that good whose marginal utility, under the circumstances prevailing, most greatly exceeds the marginal cost. Thus, throughout the whole field of industry, man will tend to produce all goods to the point where cost tends to balance utility, and therefore the relative quantity or degree of scarcity of each good will be the resultant of its utility, or demand schedule, and those objective conditions which determine, together with the constitution of man, its supply schedule; *i.e.*, which determine the sacrifice that must be undergone in its attainment.

Thus we are brought, so far as economics is concerned, to an explanation of value which ultimately makes cost an independent determinant co-ordinate with utility. Market or objective exchange value rests on subjective value. Subjective value is the dependence which man feels upon a good. This dependence is measured by the marginal gratification, or utility, afforded by the good. Marginal utility depends upon the law of diminishing utility as it applies to the individual valuer, in connection with the scarcity of the good. The scarcity of the good depends upon the law of diminishing returns as it applies to the individual good valued, in connection with the utility of the good, or, in brief, upon the balancing of

utilities and costs. But this is to be carefully noted: the balancing of utilities and costs is a cause twice removed from the value. This balancing determines the scarcity of the goods, not its value. Once produced,—the cost once past,—the good is valued by the individual solely for its marginal utility. If mistakes have been made in production,—if the cost, for example, has been unduly great,—the value of the good is not thereby directly affected. It is as always the felt dependence of the individual upon the good; *i.e.*, its marginal utility. Professor Fetter's theory of value, then, does not by any means ignore cost. It merely denies to cost a direct and immediate influence on the determination of value in the market. It fully recognizes the influence of cost on value through its effect on scarcity.

2. The second objection to Professor Fetter's theory turns on the question of the taxonomic identity of land and those other productive agents to which alone the term "capital" is usually applied. Rent may not be attributed to all productive agents, say the critics, since there is a profound economic distinction between land and other permanent goods. The orthodox grounds of this distinction, without the support of which it must be abandoned, are two assertions: namely, (1) that a special law governs production from land; and (2) that land, as distinguished from most other instruments of production, is incapable of increase. The first of these grounds of distinction has been sufficiently considered in the earlier portion of this paper, where it was shown that the law of diminishing returns is of universal application. The allegation of fixity in the supply of land can be refuted in a very few words.

It must, of course, be admitted that the physical amount of land is fixed. It is not, however, the physical amount, but the economic supply of land, that is of importance in

this discussion. In regard to the economic supply there is no essential distinction between land and any other productive agent. Like all other permanent goods, the scarcity of land is diminished at the expense of effort which tends to increase as the number of units produced increases. It may be that the expense of reducing the scarcity of land tends to increase more rapidly than the expense of combating the scarcity of many other agents. But this fact does not constitute a valid ground for placing land in a distinct class by itself. As a matter of fact, the economic supply of land, through the instrumentality of improved modes of transportation, irrigation, reclamation, and fertilization, has in the modern industrial era been increased as rapidly as most other forms of productive agents. The orthodox method of classifying productive agents is fallacious. The only classification possible is one on the basis of continuity. And, when such a classification is made, it will be found that, while some kinds of land lie at the upper end of the continuity series, other kinds are so interspersed among the so-called capital goods that any separation of land on legitimate grounds into a distinct class is impossible. If this statement be true, any distinction between land and other forms of capital is, so far as economic theory is concerned, unwarrantable.

3. Coming now to interest, is it true that the critics are right in declaring that the theory here enunciated leaves no place for the effect of productivity upon income? It is indeed true that in this view the interest *rate* is in no wise directly dependent upon productivity. But it does not follow that productivity—*i.e.*, the income from permanent goods—is left out of account in determining the amount of interest. The criticism arises from a failure to assimilate thoroughly the fundamental notion that capital value is the resultant of income, of productivity, and varies with the variation of income, of productivity.

When this conception is firmly grasped, the influence of productivity on interest is clearly seen.

The capital sum on which interest is paid is itself but the discounted sum of a series of prospective incomes. Changes in productivity, in prospective incomes, work their effect in changing capital value. But the process of capitalization is antecedent to the interest problem. The extent of the capitalized value of the series of productive incomes has nothing directly to do with the rate of discount of the gratifications wrapped up in that capital sum. This is a purely psychological matter. But, while the rate of interest remains the same throughout all changes in the productivity of a given good, it is equally evident that those changes affect the amount of interest paid, through affecting the capitalized value of the series of incomes which the good represents. As stated above, however, changes in productivity affect directly only capitalization. The interest problem arises subsequent to this process of capitalization, and assumes it.

4. Finally, does Professor Fetter identify rent and interest? The argument advanced by the critics seeks to prove this. Interest, they say, is paid out of income from produced goods; but Professor Fetter has practically asserted that the income from any class of goods is rent. Therefore, he has really wiped out the distinction between the two economic categories of interest and rent. It is true that interest is a species of income, and thus comes out of the goods that go to make up rent. But interest rests upon grounds quite distinct from those which govern the payment of rent, and its amount is determined by a principle altogether different from that which determines the amount of rent. Economic rent is simply the immediately arising incomes from an uncapitalized productive agent. Contract rent is but economic rent paid over under contract to the owner of the agent as it arises. The

amount of rent is governed directly by the productivity of the agent. Interest, on the other hand, is a market expression of the discount which rents as a prospective series undergo in the process of capitalization. It is a contractual rate paid because of the deterioration, in the market estimate, of prospective rents, due to the lapse of time. Surely there is here no identification of rent and interest. Indeed, one fails quite to appreciate the significance of the change in point of view taken in Professor Fetter's theory, if one continues to ally rent and interest as co-ordinate incomes. In his view the problems of rent and of capitalization are essentially different stages in the analysis of value.

Whether the further development of Professor Fetter's line of thought is destined to put a term, however brief, to the controversial discussion of the main taxonomic elements of economic theory, it is, of course, impossible to predict. This much, however, is certain: he has presented to economic students a system which, for logical consistency, is without precedent; a system which from the first fundamental conception advances without break to the end; a system through which with clearness there runs one essential chain of thought to which every specific problem is referred, and as successive links of which the problems of the value of consumption goods, rents, wages, and profits, the value of productive agents, and interest are successively solved. The logical sequence and harmonious symmetry of this work affords, at least, a strong presumption of its essential truth.

ROBERT F. HOXIE.

STOCKHOLDERS' PROFITS FROM PRIVILEGED SUBSCRIPTIONS.

I.

A RAILROAD company frequently finds it necessary to obtain funds for new permanent expenditures. The growth of population in the territory tributary to the road, and its consequent growth of traffic, the improvements in the mechanical appliances in railway equipment, and the pressure of competition, all demand frequent and large outlays. New branch lines must be built, the roadbed must be ballasted with stone, the weight of the rails must be increased, grades must be cut down, the line must be straightened in order to allow greater speed of trains, and the equipment must be increased to accommodate the growing traffic. For these activities large amounts of funds are necessary.

There are four general methods of obtaining new capital, namely: (1) by appropriating the needed funds from current earnings; (2) by creating a floating debt; (3) by the sale of new stock; and (4) by increasing the funded debt. Each of these is especially adapted to certain specific purposes, while for other purposes several alternative courses are open. For that class of expenditures known as betterments—namely, reductions of grades, reballasting, and the like—a common source of funds is the current earnings of the system. This policy is followed by a large number of railway companies, conspicuous among which are the Lake Shore & Michigan Southern, the Michigan Central, and the Pennsylvania Railroad. The last-named company has for years pursued the policy of retaining about 50 per cent. of its earnings in its surplus account, a large part of which repre-

sents expenditures for betterments. In the year 1901 the Lake Shore & Michigan Southern paid out $3,516,005 in dividends, and carried $3,692,469 into its surplus account, making a total surplus to that date of $14,941,102. This surplus in large part represents expenditures upon the road-bed and equipment, and has given the Lake Shore probably the best road-bed of any company in the country. In like manner the Michigan Central has consistently followed the policy of paying only 4 per cent. in dividends and of putting all the rest of its net earnings into its road-bed.

Up to a certain point this policy is commendable. These expenditures upon the road-bed and equipment do not proportionately increase the income: hence they are only in part of the nature of capital expenditures, and only to that extent chargeable to the capital account. Yet they are necessary. The stress of competition requires that a railroad company should keep its road-bed and equipment up with the crest of progress, and any company which does not do so will soon find its system in decay. But surplus earnings are not always an adequate source of funds for all these necessary expenditures. For ordinary betterments they are often sufficient. But it frequently happens that the population and traffic grow so rapidly that this source would be entirely inadequate to furnish the additional equipment, branches, second tracks, which would be needed.

The creation of a floating debt is not practicable as a permanent method of obtaining capital. In times of depression it is invaluable as a means of deferring the issuance of bonds until they can be placed at a low rate of interest. But a floating debt consists of book accounts and promissory notes, which represent labor and property that have been bought on credit. It matures in a short time, and, if excessively large, may force a com-

pany into bankruptcy. Consequently, a resort to this expedient in procuring funds for capital expenditures is only a temporary arrangement, and the floating debt must soon be replaced by a more permanent form of liability.

This form must be either an increase in the capital stock or of the funded debt. The choice will vary with the conditions of the money market, the outlook and financial condition of the railway system, and the position of the stockholders. The choice should always further the interests of the stockholders; and by stockholders are meant not those who might, in the event of a new issue of stock, become stockholders, but those who are already shareholders in the company. The latter are the owners of the system; and, so long as they keep within the bounds of business morality and integrity,—not pursuing a course which is calculated to jeopardize the claims of the creditors,—they are entitled to promote their own interests by any legal means within their power. In this they are not even under any moral obligations to consider the interest of those who might eventually become, but who are not already, cosharers in the property.

This course will sometimes consist in increasing the funded debt, at other times in increasing the capital stock. If the old shareholders are not in position to furnish the new capital themselves, this can often be obtained to advantage through the issue of mortgage bonds, since these can usually be placed at a moderate rate of interest, leaving a surplus of increased earnings to be divided among the stockholders. But, if the latter are able to furnish the funds themselves or to benefit immediately from an increase of stock, this method will be preferable, since it will give the old shareholders not only a part, but all of the increase of earnings resulting from the new expenditures of capital, and at the same time, if the outlays

should not produce the expected returns, they will avoid the burden of increased interest charges. Thus, if a corporation whose shareholders are A, B, and C is earning 10 per cent., or $100,000, on a capital of $1,000,000, and can earn another $100,000 with the investment of another $1,000,000, it is to the interest of A, B, and C to furnish these additional funds themselves, if they are in position to do so, since they will thereby receive all the additional earnings. But, if they cannot furnish these funds themselves, it will usually be more advantageous to borrow them than to sell new stock to D, E, and F; for, if they can borrow at, say, 6 per cent., they will still have left an additional $40,000 of earnings, increasing the return on their own investment to 14 per cent., whereas, if they sold stock, the whole of the increased earnings would go to D, E, and F, the new stockholders.

At this point the subject of stockholders' privileges, stockholders' rights, or privileged subscriptions, enters as an influence which will often turn the scale in favor of an increase in the capital stock rather than in the funded debt; for, even if the old shareholders are not themselves in position to furnish the required funds, an increase in the capital stock may still be made advantageous to them. Where a railroad company's stock is selling above par, a very attractive method of obtaining new capital is to increase the capital stock and give the shareholders of record the privilege of subscribing and paying cash for it, either at par or at a price less than that for which the stock can be sold on the market. This course compensates the shareholder who is not in position to make a new investment and appropriate his share of increased earnings to result from the new expenditures by placing within his reach an extraordinary and immediate profit. Thus in August, 1902, the Illinois Central Railroad increased its capital stock 20 per cent., giving the holders

of record the privilege of taking and paying for the new shares in cash at par. The stock was at the time selling on the market at $173½, and during the six months following the subscription averaged 156.6. By taking the new stock and selling it, the shareholder could have made from $50 to $70 per share. This method we may term the method of the "privileged subscription."

The method of the privileged subscription is valuable to the shareholder only when the market price of the stock is higher than the price at which he has the privilege of taking it. He may benefit from it in one of two ways, namely: (1) by making a new investment on terms more favorable than are offered by a purchase at the market price; or (2), if he does not wish to make a new investment, he may still make a profit amounting to the difference between the market price and the subscription price of the privilege. Thus in the above illustration the stockholder could get for $100 a 6 per cent. stock which would otherwise have cost him more than $150, making his capital go one-third further, or by selling his stock he could make an immediate profit of from $50 to $70 a share. The shareholder who chooses the latter alternative may be considered as in effect discounting the dividends which he could receive by retaining the new stock.

If the shareholder wishes to dispose of his privilege, there are four courses of action open to him, namely: (1) he may subscribe for his quota of the new stock with the idea of selling it after it has been issued to him; (2) he may immediately sell short to the amount of his privilege, and deliver the new stock to satisfy the stock loan made for this purpose; (3) he may sell the same amount from his own recorded holdings, replacing the shares sold with the new stock when it is issued; or (4) he may sell his "right" to take the new stock.

The choice of these methods depends upon the special

circumstances attending each such issue of stock. The first method, the sale of new stock subsequent to its issuance, is open to considerable disadvantage. In this case the shareholder must subscribe for his quota of the new stock, and, when it is issued, must take and pay for it in cash. In all probability this means that he must borrow the money with which he pays for his shares, and that he must pay interest on it until he can realize on his stock. This period of interest-paying may be very extensive. In the first place he may be required to advance a part or all of the money some time before the new shares come into his hands. Thus, when the Chicago, Burlington & Quincy increased its stocks and bonds in 1899, the shareholders were required to pay one-half the subscription price on June 8, three months before the securities were issued. Again, in 1893 when the Great Northern increased its capital stock 25 per cent., the shareholders were required to pay their subscription money in five equal instalments, extending over a period of five months before the new shares were issued. In such a case the interest payments must greatly reduce the ultimate profits from the transaction. But, even after the new shares are issued, the holder may have to wait a long time before he can sell them at a profit, greatly swelling the interest payments; and even then he may have to sell the stock at a figure much below the price at which it stood when the new issue was authorized.

The second method, the "short sale" of stock, is at first thought more advantageous, though in reality it subjects the shareholder to great risk. In this method the shareholder, as soon as he knew what his quota of the new stock was to be, would go into the market and "sell it short"; that is, if his quota were one hundred shares, he would go to a stock broker and deposit $1,000 as security. The broker would then borrow one hundred

shares of the old stock from some holder, and sell them at the market price, but retaining the proceeds of the sale until his customer was ready to pay back his loan. Then, when the new shares were finally issued, the stockholder would turn them over to his broker, who would then repay the stock loan he made, and give his customer a cheque for the proceeds of the sale plus the $1,000 "margin money," less the brokerage commission. Our supposititious stockholder would still have to borrow the money with which to pay his subscription, but this period of interest payment would terminate as soon as he had settled with his stock broker. His profit would consist of the difference between the proceeds of the sale, after deducting the broker's commission and interest on the $1,000 "margin money" and money borrowed to pay his subscription, on the one hand, and the price he had to pay for the new shares, on the other.

The advantage of this method is twofold: first, it shortens the period of interest payment; second, it enables the shareholder to sell his quota of new stock at any time after the new issue is authorized, or even before it has been authorized,—namely, as soon as it has been advertised,—and thus to take advantage of a favorable market. He can thus not only sell to the greatest advantage, but he can in a measure insure his returns. Subsequent changes in the market price of the stock will not affect his profits unless his "margin" should be wiped out or he should have to advance more "margin," thus increasing his interest losses.

But it may occasion him some inconvenience and embarrassment. When his broker borrowed the shares he sold, he borrowed them subject to "call." If the market price should change a few points and the lender wish to sell his holdings, he could "call" on the broker for the shares he loaned him, and the latter would either have to

go into the market and buy them or find some one who was willing to lend him another hundred shares. Or, if the market price should rise ten points, the $1,000 margin money would be exhausted, and the broker would have the right to call for more margin money or "close" the stockholder out. To save his deposit, the latter would have to advance an additional $1,000, thus increasing his interest losses. Eventually, however, his margin money, now increased to $2,000, would be returned to him, together with the proceeds of the sale of stock.

A graver danger than either is the risk the shareholder runs of having his stock cornered. A good illustration of this was seen recently in the Louisville & Nashville corner. In this case the shareholders found that they had sold more shares of Louisville & Nashville than actually existed. As a result, they had to buy the shares with which to repay their stock loans from J. W. Gates, who had cornered the market. The price they paid for them was, of course, dictated by Gates himself. The shareholder who uses the short sale as a method of realizing on his privileges may at any time find himself in this predicament, and have to settle at terms dictated by the "financier" who has cornered the market.

A method which will avoid all these disadvantages and at the same time retain the advantages of this method is the third. If a shareholder entitled to one hundred shares of new stock can at once sell an equal number from his recorded holdings without impairing his privilege, he can thus keep his investment intact, and still take the same advantage of a favorable market that he would have in a short sale; and, instead of losing the interest on his margin money and on the money borrowed to pay his subscription, he would immediately get the use of the proceeds of the sale,—an advantage he did not have in

the preceding case. Further, he would be saved the risk and expense of "remargining," the annoyance of having to pay back his stock loan and hunt up a new one, and avoid altogether the risk of having his stock cornered.

The manner in which these privileges are extended usually enables the stockholder to follow this method without impairing his privilege. They are always extended with reference to a particular date, which we may term the "date of record." On that date the company's stock journal and stock ledger are closed and each shareholder's holdings are ascertained; and, no matter how many shares he may sell after that date, the extent of his privilege as then ascertained remains unchanged, unless he should waive or transfer his right.

Thus on October 16, 1901, the shareholders of Illinois Central voted to increase the capital stock 20 per cent., offering each holder of record on October 30 the right to take the new stock at par to the extent of 20 per cent. of his holdings, the privilege to lapse after November 27. Accordingly, on October 31 a holder of one hundred shares might have sold twenty of them, and still have retained the right to subscribe for twenty new shares. An even more favorable illustration was the increase of stock authorized on January 26, 1901, in which each holder of record on December 2, 1900, had the right to subscribe at par to the extent of 10 per cent. of his holdings. Here a stockholder might have taken advantage of a favorable market nearly two months before the new issue was authorized to sell 10 per cent. of his holdings, and without impairing his right subsequently to subscribe at par for an equal number of new shares.

This method would have been especially advantageous in the Illinois Central's privileged subscription of August, 1902, where the stockholder could have sold his shares at once at a price near $170, whereas a little later he would

have had to sell at a figure near $150. On the other hand, as it turned out, in the privilege of January 26, 1901, mentioned above, it would have been more advantageous to wait and sell the new shares themselves after their issue, the price of the stock having risen from a minimum of $116 before the issue to an average of $140 during the six months following it.

This manner of issuing new stock—namely, by putting the date of record some time in advance of the subscription date—gives a similar advantage to the fourth method, the sale of the "right." By this is meant that the privileged shareholder either sells his right to subscribe for the new stock, or, if this cannot be done under the terms of the privilege, he sells the new stock outright in advance of its issue. Thus the New York Central advertises an increase of its capital stock, adding: "Shareholders of record May , 189 , *or their assigns,* will have the right," etc. In this case the shareholders may sell and assign their right to subscribe for the new shares. Sometimes the right to assign is restricted. Thus, when the Pennsylvania Railroad increased its stock in 1890, the shareholders were permitted to sell their "rights" to any other holder of record, but to no others. If the right to assign is withheld, the same results may be obtained by selling the new stock itself in advance of its issuance, it being understood that delivery is to be made after the stock is issued. This resembles the "short sale" in the second method, but with this difference: In this case no stock is delivered until after the new shares have been issued, while in the short sale delivery is immediate, the broker borrowing the shares which he transfers, afterward repaying the lender with the new stock.

As in the preceding two methods, the sale of the "right" enables the shareholder to realize on his privilege as soon as it is granted. Indeed, the shareholder can in this

way often dispose of his privilege even before it is extended to him; namely, as soon as the proposition to increase the capital stock and to extend the privilege is advertised. Just as in 1901 United States Steel stocks were bought and sold before they were even issued, delivery to be made as soon as they were issued, so, where it is practically certain that a railway corporation is going to extend a privilege to its shareholders, these privileges may be sold in advance, delivery to be made as soon as the "right" is voted. In several instances the "right" has been sold thirty and sixty days before it was ever granted. In this respect this method is even superior to the preceding in the opportunity it offers for taking advantage of a favorable market.

From the standpoint of returns the "sale of the right" ranks next to the sale of stock from the original holdings. The manner in which rights are quoted on the New York Stock Exchange is calculated to confuse those who are not acquainted with the technique of the exchange and to misrepresent the real value of this method. The meaning of the quotations may be explained in the following illustration. Suppose that the Burlington increases its stock 20 per cent., giving the holders of record the right to subscribe at $150 for one new share for every five old shares held. The holder of one hundred old shares would have the right to take twenty new shares. The market value of Burlington stock is $200, leaving a prospective gain of $50 per share subscribed. Now, if the holder wished to sell his privilege in Philadelphia, he would go to a broker on the Philadelphia Exchange, and say, "I want to sell twenty rights at 45." In this case he would get $45 for a right to subscribe for one share of new stock, $900 for the twenty rights.

But, if he were in New York City, he would say to the broker there, "I want to sell one hundred rights at 9,"

meaning that he wished to sell the right which one hundred old shares would have at 9 per cent. of their par value, or $900. On the Philadelphia Exchange a "right" means the right to subscribe for one new share of stock, and is valued in dollars: on the New York Exchange a "right" means the right which one old share would have to participate in the subscription for the new stock,— in the above illustration one-fifth of a share,—and is valued as a percentage of the par value of the old stock. In the above illustration one Philadelphia right is equal to five New York rights.

This New York custom is especially confusing in the quotations of the so-called "half-stocks"; *i.e.*, shares whose par value is $50 instead of $100. Thus, if the Pennsylvania Railroad should offer a privilege of "one in five" at $60 per share when the market value of the stock was $72, a holder of one hundred old shares, wishing to sell his right to twenty new shares, would say to his Philadelphia broker: "I want to sell twenty Pennsylvania rights at 10." But to his New York broker he would say, "I want to sell one hundred rights at '4.'" If the par value of Pennsylvania had been $100 instead of $50, he would have sold his one hundred rights at "2" instead of "4"; that is, where the par value of the stock is halved, the percentage at which the privilege sells is doubled. These complications are confusing to stock brokers themselves. They must be well-nigh impenetrable to the ordinary uninstructed investor.

It is commonly supposed that the value of rights is very low as compared with their intrinsic value as indicated in the market price of the stock. Quite the contrary is true in many instances. Thus in the case of Illinois Central in February and March, 1901, when the stocks were quoted at from $127\frac{3}{8}$ to $139\frac{1}{2}$, the privileges of subscribing at par for "one share in ten" were quoted at from

2⅝ to 3¼. This means that the right to subscribe for one-tenth of a share of new stock sold at from $2.62½ to $3.25, or the right to take one whole share, cost from $26.25 to $32.50. These correspond very closely to the premiums of $27.37½ to $39.50, respectively, on the stock. Again in November, 1901, when the premiums on the stocks were $38 and $42½, the rights to "one share in five" at par were worth from $37.50 to $41.25,—figures remarkably close to the premium. And in August, 1902, the rights were worth from $43.75 to $61.75 a share of new stock, when the premium on the old was $41 to $73.50 a share. In other cases the correspondence is not so close. Thus the Pennsylvania "rights" of 1903 were worth from 94 cents to $5.63 per share when the market price of the stock was from $1.50 to $14.25 higher than the subscription price of the new stock. Again, in 1901, when the premiums ranged from $18.50 to $30.75, the rights were worth only from $10.12½ to $16.87½ per share.

Usually, the profit from the sale of the right will be less than by selling stock from the original holdings. The reasons are obvious. In the latter case, since the sale is a sale of stock, it is at the full market price, and the seller gets the full advantage of the premium; but, if a right is sold, this is usually to a stock broker, who is speculating on the increase of the stock, and not to investors. Investors are not as yet very well acquainted with "rights." Consequently, a safe margin must be left the purchaser to cover possible fluctuations in the price of the stock during the interval elapsing between the sale of the right and the appearance of the new shares, and also to leave the speculator a margin of profit. Further, by selling the "right," the shareholder discounts the prospective gain from the increase of stock. He receives his profits at once instead of waiting until the new shares are issued. The prospective gain is thus discounted just as effectually as

is a promissory note which is sold to a bank before its maturity. Money in hand is worth more than an equal amount due at a future date. This applies with especial force to those cases in which the "rights" are sold in advance of their authorization. Finally, the sale of the "right" insures the return from the privilege by converting an uncertain future profit into a certain present profit. In practice, brokers figure the "rights" at from 15 to 20 per cent. less than the prospective gain from the privilege.

This fact makes the "right" valuable to those who are seeking investments on favorable terms. If an investor wishes to buy a high-grade stock, he can get it on more favorable terms by purchasing "rights" than by going into the market and buying the stock outright. Thus in the case of the Pennsylvania Railroad stocks in 1903, mentioned above, by purchasing "rights" an investor would have been able to obtain for about $65 a 6 per cent. stock which would have cost him $70 in the open market. Again, in 1901, he would have thus been able to get for from $70 to $77 a stock which would otherwise have cost him from $78.50 to $90.75. The purchase of "rights" has been an especially available method of getting good investments during the last five years. During this time there have been twenty-six increases of railway stocks with privileges attached, five of public service corporations, and seven of "industrial" stocks.

To sum up to this point, of the four methods of disposing of privileges in the increase of capital stock, the sale of "rights" and the sale of shares from the recorded holdings are the most valuable. Of these two the latter is usually a little the more remunerative. The purchase of "rights" offers an opportunity to investors of getting first-class securities more cheaply than they could get them on the market.

II.

Having disposed of the methods of benefiting from stockholders' privileges, the next question of interest is the extent of these benefits. It is not to be denied that the proceeds from these privileges in many cases constitute a very material addition to the current dividends which are received by the stockholders, and that they are to be reckoned in when one is estimating the yield on his investment. But these extraordinary gains come in at irregular intervals. To obtain any accurate idea of their extent, it is necessary to state them in the form of equivalent returns coming in at regular intervals, like dividends.

This is difficult. If one could clearly foresee how many and at what times all such privileges would occur in the future, their terms and market values, and if one could assume that the current rate of interest would remain at, say, 5 per cent., then we could have a theoretically perfect method of converting these irregular into regular incomes. The task would consist in expressing the net gain from each privilege, past and future, in the form of an equivalent annuity (or dividend) for a period corresponding to the life of a corporation. The sum of these annuities, together with the current dividends, would give the total of an equivalent dividend or return on the investment. The problem of finding the present worth of a sum due at a future date, or of an annuity, is very simple; and this, its exact converse, would be equally simple.

In the absence of prophecy a less rigorous though almost equally satisfactory method may be followed. We cannot find the value of privileges in the future, but we can find approximately the value of past privileges. Frequent reference has been made in the foregoing para-

graphs to the various privileged issues of Illinois Central stock; and the method of reckoning the proceeds of these privileges in with the current dividends may be illustrated and explained by applying it to those issues in turn, beginning with the first one of June 1, 1887. The following table shows the dates of the various increases of Illinois Central stock from 1887 to 1903, together with the terms of the subscriptions, the average market value of the stock during the six months preceding and during the six months following those issues:—

TABLE I.—ILLINOIS CENTRAL.

Date of issue.	Per cent. of increase.	Amount of increase.	Privilege.	Price during preceding six months.		Average price during six months ensuing.
				Average.	Limits.	
June 1, 1887 . .	33⅓	$10,000,000	par	$135	—	$120[illegible]
Nov. 1, 1890 . .	12½	5,000,000	"	100[illegible]	—	103[illegible]
1892 . .	11[illegible]	5,000,000	"	98[illegible]	—	98[illegible]
Nov. 1, 1895 }	{ 5	2,500,000	"	{ 97½	—	95
July 1, 1899 }	{ 15	7,500,000	"	{ 97½	—	114[illegible]
Jan. 26, 1901 . .	10	6,000,000	"	126	$116–132	140[illegible]
Nov. 1, 1901 . .	20	13,200,000	"	144[illegible]	138–148	135[illegible]
August, 1902 . .	20	15,840,000	"	160[illegible]	150–173½	152[illegible]

To illustrate the method, let us make the following assumptions:—

1. That A buys 100 shares of Illinois Central stock during the six months preceding one of these stock increases.

2. That he subscribes each time for his quota of new shares, selling them again within the ensuing six months.

3. That he borrowed the funds with which to take his quota from the bank for an average of three months, paying 5 per cent.

4. That he sells his investment at the end of 1903.

5. That money has been worth 5 per cent. all this time. And then let us answer this question, Not counting any

gain or loss resulting from the final sale of his investment, how much on the average has A made each year on his investment? This statement of a definite problem will serve to keep ideas clear.

First, let A buy his one hundred shares just prior to June 1, 1887. If he paid the average market price of the stock during that period, the table shows that his investment was $13,500. Now in regard to the value of the eight privileges there are two methods of computation, each the exact equivalent of the other. In the first the procedure would be as follows:—

1. To find A's *immediate* gain from the privilege.

2. To find the amount on this at 5 per cent. at the end of the calendar year in which it is extended.

3. To convert this amount into an equivalent annuity (or dividend), running (in this series) from 1887 to 1903, inclusive (a period of seventeen years).

4. To add all these annuities and the current dividends together, obtaining a total annual dividend on the investment.

The second step is inserted for convenience in computation. The procedure in the second method would be as follows:—

1. The same as in the first method.

2. The same as in the first method.

3. To find the amount at the end of the year 1903 on each of the amounts obtained in the second step.

4. To add these amounts together.

5. To express the resulting total as an equivalent annuity extending over the seventeen-year period.

6. To add this annuity to the current dividends.

This method, although containing a greater number of steps, is in reality shorter than the first. The work of converting the amounts of the gains into equivalent annuities requires the use of tables of logarithms: other-

wise there is nothing difficult or mysterious in the computations.[1]

In the following table, which contains a summary of the results of all these computations for the Illinois Central's privileges as given in the preceding table, the first method was followed:—

Table II.

ILLINOIS CENTRAL PRIVILEGES.—FIRST METHOD.

Date of privilege.	Immediate profits.	The value of the privilege expressed as an annuity terminating December 31, 1903, and beginning in the year of the original investment. The stockholder invests in the year					
		1887.	1890.	1892.	1895.	1900.	1901.
June 1, 1887 . . .	$673.25	$56.87	—	—	—	—	—
Nov. 1, 1890 . .	29.93	2.18	$2.21	—	—	—	—
Dec. 31,[2] 1892 . .	—27.78	—1.84	—2.55	—$2.99	—	—	—
Nov. 1, 1895 . .	—31 51	—1.84	—2.37	—2.92	—$4.22	—	—
July 1, 1899 . .	201.80	7.92	12.52	15.41	22.76	—	—
Jan. 26, 1901 . .	391.25	17.53	23.11	28.46	41.07	$104.60	—
Oct. 31, 1901 . .	690.71	29.47	38.86	47.84	67.50	176.68	$241.55
August, 1902 . . .	1,048.36	42.62	56.19	70.48	99.85	255.40	349.16
Total privilege		$152.94	$127.96	$156.28	$226.96	$536.68	$591.71
Investments		13,500	10,025	9.875	9,750	12,600	14, 437
Privilege as per cent. of investment		1.13%	1.28%	1.59%	2.33%	4.26%	4.09%
Net yield before 1900[3] . . .		4.84	6.26	6.65	7.46		
Net yield after 1903[4]		5.58	7.26	7.66	8.48	9.02	8.25

The first column of this table gives the dates of the eight privileges, the second column shows the immediate profit which is realized on each by the holder of one hundred old shares. The remaining columns convert these immediate profits into equivalent annuities extending over the investment period. Thus a man who invested in 1887 and sold his investment December 31, 1903, would

[1] The process of finding the present worth of a sum of money due at a future date is the exact converse of that of finding the amount at compound interest on a sum due at that future date. Both processes require the application of algebraic formulæ.

[2] Assumed date. [3] Dividends, 5 per cent. [4] Dividends, 6 per cent.

pro-rate his profits over a period of seventeen years. This is done in the column headed "1887." Investing in 1890, he would pro-rate over a period of fourteen years. This is done in the column headed "1890." Finally, rows are inserted to show the total of the annuities received by the investors, the amounts of the investments in one hundred shares at the various times, the yield on the investments from privileges, and the total yield from privileges and dividends. Thus, if A purchased one hundred shares in 1887, he netted a profit of $673.25 on his first privilege. This, as the third column shows, is equivalent to a return of $56.87 a year for seventeen years. He received $201.80 from his fifth privilege, or the equivalent of $7.92 a year, $690 on the seventh, or $29.47 a year, and $1,048, or $42.62 a year on the last.

A man who invested in 1887 has received from all privileges the equivalent of $152.94 a year for seventeen years, or 1.13 per cent. on his investment of $13,500. Investing in 1895, he has received the equivalent of $226.96 a year for nine years, or 2.33 per cent. on his investment of $9,750. Finally, a man who invested in 1900 has received from privileges alone 4.26 per cent. a year on his investment of $12,600, or nearly as much as he has received from his 6 per cent. dividends.

In the above table it was assumed that the stockholder sold his new shares during the six months succeeding their issuance. Table III. presents the returns on the same privileges on the assumption that the stockholder, immediately after the new issues were authorized, sold a part of his recorded holdings and replaced the shares sold by the new stock when issued.

In this table, column 3 shows the immediate profit on each of the eight privileges, column 4 the amount on this at 5 per cent. on December 31, 1903. Column 6 represents the total on December 31, 1903, from all privileges of

Table III.

ILLINOIS CENTRAL PRIVILEGES.—SECOND METHOD.

1	2	3	4	Sum of all privileges after investment date.		This sum expressed as an annuity.		9	10	11	12
Date of privilege.	Average price during 30 days preceding issue.	Immediate profit on privilege.	Amount at 5 per cent. December 31, 1903.	5 Invest-ment date.	6 Total amount from privi-lege.	7 Annuity period.	8 Annuity.	Per cent. of invest-ment	Total yield be-fore 1900 (per cent.).	Total yield after 1900 (per cent.).	Invest-ment.
June 1, 1887	$136\frac{1}{8}$	$1,252.15	$2,733.25	1887	$5,740.42	17 yrs.	$222.15	1.64	5.35	6.09	$13,500.00
Nov. 1, 1890	$100\frac{3}{8}$	9.46	17.84	1890	3,007.17	14 "	153.44	1.53	6.52	7.52	10,025.00
Dec. 31, 1892	$101\frac{7}{8}$	20.83	35.61	1892	2,989.33	12 "	187.82	1.90	6.97	7.97	9,875.00
Nov. 1, 1895	98	—10.08	—14.89	1895	2,953.72	9 "	265.87	2.73	7.86	8.88	9,750.00
July 1, 1899	$112\frac{3}{8}$	196.03	238.27								
Jan. 26, 1901	$128\frac{1}{8}$	280.22	324.39	1900	2,730.34	4 "	633.49	5.03	—	9.79	12,600.00
Oct. 30, 1901	$143\frac{7}{8}$	884.81	975.50	1901	2,405.95	3 "	763.21	5.28	—	9.44	14,437.50
August, 1902	167	1,362.33	1,430.45	1902	1,430.45	2 "	697.77	4.24	—	8.08	16,062.25

which the investors at the various dates would have received the benefit. Thus, if our stockholder A invested $13,500 in one hundred shares in 1887, he has received from all of his eight privileges a total, principal and interest, of $5,740. This is equivalent to a return of $222 a year during the seventeen years of his investment, or 1.64 per cent. A man making a similar purchase in 1895 has received from his five privileges a total of $2,953, which is equivalent to $265, or 2.73 per cent. a year on his investment, during the nine years of his investment period. Stockholders who made their investments in 1900, 1901, and 1902, respectively, have made from privileges alone 4¼ to 5¼ per cent. per annum on their investments, and that, too, when their original purchases were made at very high premiums. In these cases the returns from privileges have exceeded the returns from the current 6 per cent. dividends.

A comparison of Table III. with the preceding shows that the returns from privileges have been greater in the former than in the latter. This is as was expected. The stockholder in selling at once from his original holdings when a new issue of stock is authorized, instead of waiting until the new shares are issued, takes advantage of the market when it is most favorable, and realizes more on each privilege.

It will also be noticed that the returns from privileges have been greater in the cases of the later investments than in the earlier. This is due to the greater frequency and liberality of privileges in more recent years, due to the rapid growth and improvement of the Illinois Central system since 1893. The Illinois Central Company has been very liberal to its stockholders. A company which has been even more liberal is the Great Northern, as is shown in Table IV.

In this table, which is constructed on the same pattern

Table IV.

GREAT NORTHERN PRIVILEGES.

1 Date of increase of stock.	2 Per cent. of increase.	3 Privilege.	4 Immediate loss or gain.	5 Amount at 5 per cent. December 31, 1903.	6 Total amount on privilege.	Column 6 as an annuity. 7 Annuity period.	Column 6 as an annuity. 8 Annuity.	9 Per cent. of investment.	10 Yield from current dividends (per cent.).	11 Total yield on investment (per cent.).	12 Investment.
June 1 to Oct. 2, 1893	25	par	$458.40	$746.68	$15,713.44	11 yrs.	$1,106.11	8.12	3.69 5.17 5.51	11.81 13.29 13.63	$13,625.00
July 1 to July 28, 1898	100	60[1]	6,816.00	9,699.00	14,966.76	6 "	2,200.35	14.32	4.52 4.85	18.74 19.07	15,475.00
May 20 to June 17, 1899	20	par	1,379.00	1,676.10	5,267.76	5 "	953.26	5.71	4.19 4.49	9.90 10.20	16,700.00
Jan. 29 to Feb. 24, 1900	10	par	615.00	711.93	3,591.66	4 "	833.33	4.94	4.15 4.45	9.09 9.39	16,875.00
Apr. 15 to May 20, 1901	25	80[1]	2.612.00	2.879.73	2,879.73	3 "	913.62	5.25	4.02 4.31	9.27 9.56	17.437.50

[1] Nominally at par.

as Table III., five privileges are represented, four since 1898. As shown in column 6, a man who purchased one hundred shares of Great Northern stock prior to June 1, 1893, has received, principal and interest, from privileges alone a total of $15,713 by December 31, 1903. This is equivalent to a yearly return of $1,106, or 8.12 per cent. on his investment of $13,625. The stockholder who made a similar purchase just prior to July 1, 1898, has received from privileges alone a total of $14,966, which is equivalent to an annual dividend, during the six years of his investment, of $2,200, or 14.32 per cent. on his investment of $15,475. Returns on later investments have ranged from 4.94 per cent. to 5.71 per cent. It is to be observed that in every case the returns from privileges have considerably exceeded the returns from 7 per cent. dividends, while in one case the privileges yielded three times as much on the investment as did the current dividends. This phenomenal result was due to the exceptional privilege in 1898 of 100 per cent. of the old holdings at practically $60 a share. An explanation of this case will appear further on.

The liberality of the Great Northern's privileges has been unprecedented; and, together with the 7 per cent. current dividends, these have kept the Great Northern stock at a very high premium. In contrast with these are the privileges of the New York Central. In recent years that company has made three increases of stock of 10, 15, and 15 per cent. in 1893, 1900, and 1902, respectively, as shown in Table V.

By comparing columns 9 and 10, it will be seen that the yields from privileges alone were, in the last two instances, little more than one-third of the *total* yield on the investment, while in the first instance the privileges made a comparatively insignificant addition to the income. None of these compare favorably with the returns from Illinois Central's privileges, which were from 1.58 per cent. to

Table V.

NEW YORK CENTRAL PRIVILEGES.

1	2	3	4	5	Column 5 as annuity.		Yield on investment from privileges.		10
Date of privilege.	Terms (per cent.)	Immediate gain.	Amount at 5 per cent. December 31, 1903.	Total amount all privileges.	6 Annuity period.	7 Annuity.	8 Investment.	9 Yield (per cent.).	Total yield on investment (per cent.).
June 1, 1893	10 par	$19.22	$31.37	$1,214.09	11 yrs.	$85.46	$10,800	0.79	5.42–5% div. 4.50–4% " 4.73–4½% "
Dec. 2, 1899 Jan. 2, 1901	15 par	503.25	582.57	1,182.72	4 "	274.41	13.700	2.00	5.65–5% " 4.92–4% "
March 31. 1902	15 at 125	571.57	600.15	600.15	2 "	292.76	16,333	1.80	4.85–5% "

5.28 per cent. on the investment. This is due to the relative infrequency of privileges granted by the New York Central Company (only three in eleven years as compared with six offered in the same time by the other company), to their small extent, and to the fact that in one of them the subscription price was at 25 per cent. premium instead of at par, as is usual.

Another company whose privileges have yielded small returns is the Baltimore & Ohio, as shown in the following table:—

Table VI.

BALTIMORE AND OHIO PRIVILEGES.

Yield from Sale of Old Stock.

1 Date of privilege	2 Terms (per cent.).	3 Loss or gain.	4 Amount December 31, 1903.	5 Total amount gain from privileges	6 Column 5 as Annuity.	7 Yield on investment (per cent.).	8 Investment.
Apr. 21, 1900 .	16⅔—80	—$56.25 75.00	$89.74	$415.50	$96.41	1.67	$5,762.50
Dec. 24, 1901 .	20 par	65.00	71.66	325.76	103.45	1.29 1.51	10,325 common 9,400 preferred
Oct. 17, 1902 .	30 par	240.00	254.10	254.10	123.95	1.00 1.10	10,800 common 9,575 preferred

Yield from Sale of Rights.

Apr. 21, 1900 .	16⅔—80	$75.00	$89.74	$424.92	$98.59	1.71	$5,762.50
Dec. 24, 1901 .	20 par	75.00	82.69	335.18	106.34	1.03 1.13	10,325 common 9,400 preferred
Oct. 17, 1902 .	30 par	237.50	252.49	252.49	123.17	1.14 1.28	10,800 common 9,575 preferred

Since the reorganization of the Baltimore & Ohio system the capital stock has been increased only three times, —in 1900, 1901, and 1902, respectively. In the case of

the first privilege, which was offered at $80 a share, the market price of the stock was even below that figure Consequently, the profits from the sale of "rights" were substituted for the loss which would have resulted from the sale of stock in this instance. With this substitution the yield from the sale of old stock ranged from 1 per cent. to 1.67 per cent. on the investment.

This table brings out another interesting point in connection with the sale of rights as a method of realizing upon privileges. The market price of the stock may sometimes be below the subscription price. In such a case the sale of stock would entail a loss. But it frequently happens that in such cases the "rights" will have a positive value, so that the shareholder may after all net a profit where a loss would naturally be expected. The second part of Table VI. shows the yield from the sale of "rights," which ranged from 1.03 per cent. to 1.71 per cent. on the investment, just a little more, in this case, than the yield from the sale of stock from the recorded holdings.

The meagrest returns have come from the Missouri Pacific privileges, which are shown in Table VII.:—

TABLE VII.

MISSOURI PACIFIC PRIVILEGES.

1	2	3	4	5	6	7	8
Date of privilege.	Terms (per cent.).	Immediate loss or gain.	Amount December 31, 1903.	Total amount gains from privilege.	Annuity.	Yield on investment (per cent.).	Investment.
Feb. 26, 1886 . . .	10 par	$53.75	$128.32	$1,011.36	$35.95	0.34	$10,425
June 12, 1886 . . .	9 par	81.00	190.79	883.04	31.49	0.29	10,825
Oct. 16, 1886 . . .	10 par	150 00	350.67	692.25	24.61	0.23	10.850
Mar. 19, 1887 . . .	10 par	90.00	202.52	341.58	13.22	0 12	11,075
May 13, 1890 . . .	15	-6.84	-13.31	139.06	7.10	0.09	7,200
July 5, 1901 . . .	15 par	135 00	152.37	152.37	70.78	0.73	9,700

This company offered four privileges in 1886 and 1887, one in 1890, and one in 1901. All have been of moderate extent, and the stock has sold at comparatively small premiums, in one case at a discount. As a result, the privileges have yielded only from 0.09 per cent. to 0.73 per cent. per annum on the investments, even when these have been made at a discount.

A review of the five sets of privileges set forth in the above tables will bring out several facts. First, a company which is in a sound financial condition, as are the Illinois Central and the Great Northern, and which pursues a liberal policy toward its stockholders, may greatly add to their annual income through the privileges it offers. Secondly, the profits from these sources are not adequately reflected in the market price of the stock. Thus the Illinois Central stock, which has in recent years been yielding its holders from 8¼ to 11.9 per cent. on its par value, has been selling at from $120 to $170,—prices which should go with a 6-to-8 per cent. stock. Great Northern stock has been paying its holders from 15 to 21 per cent. per annum on its par value; yet its market quotations have ranged only from $136 to $200,—prices which should naturally go with a 7-to-12 per cent. investment. This is naturally to be expected. The returns from privileges, though known to be large, came at irregular intervals and in irregular amounts. Consequently, the ordinary man who is not a mathematician does not know how these returns compare with the regular returns from current dividends. Further, although he may realize that past returns from these sources have been large, he has no means of judging of future returns from the same sources.

In concluding this part of the discussion, it must not be forgotten that the method of treating privileged subscriptions as outlined and illustrated above can be only

retrospective. It can show only what the returns from privileges have been in the past: it cannot look into the future. Whether privileges will be as remunerative in the future as in the past can in small measure be judged from the revealed policy of the railway company. A corporation which has consistently pursued a liberal policy towards its stockholders may, presumably, continue such liberality in the future if opportunities arise. But these opportunities arise only in connection with the growth of the railway system and in its improvement. The recent past has been a period of great growth and improvement, but it seems likely that most of the Eastern and Middle Western railway systems have nearly reached their full development. If such is the case, it is probable that these companies will have fewer opportunities for liberality than have come to them in recent years. Many of the Western and Pacific systems, however, will continue to grow and be improved for many years to come; and we may expect stock privileges to be important features of their financial operations.

III.

In the foregoing paragraphs the privileged subscription has been treated as a sub-topic in the larger subject of methods of procuring new capital funds,—in fact, as an influence affecting the choice between the issuance of bonds or stocks. The profits from these privileges, as shown in the practical study of the policies of the Illinois Central and other railroads, show that the privileged subscription may become a very potent factor in determining that choice in favor of the increase of the capital stock. For, whether or not the condition of the shareholders' personal finances would enable them to subscribe for and retain the new shares, the privileged subscription may in either case prove of material financial advantage to them.

Two questions remain for discussion. The first was suggested by Professor E. S. Meade in a paper read before the American Economic Association in December, 1903, "The Management of the Surplus Reserve," in which he named the privileged subscription among the methods of distributing a company's surplus to its stockholders. He says, in this connection, "The rate of dividend may be increased, or the assets of the company may be directly distributed to stockholders, either by means of a stock dividend or what is known as a privileged subscription." Is the privileged subscription a method of distributing a company's surplus to its stockholders, and, if so, in what way does it accomplish this?

To clear up this point, it will be expedient to define the term "surplus" and, incidentally, to distinguish between a corporation's "capital" and its "capital stock." The capital of a corporation is the excess of its assets—*i.e.*, its real estate, cash, book accounts receivable—over its liabilities to its creditors,—namely, bonded debt, outstanding promissory notes, and book accounts payable. The capital is the net investment in the corporate business. This capital, or net investment, is in part represented on the other side of the corporate balance sheet by the "capital stock"; *i.e.*, the par value of the certificates of ownership in the corporate property which are held by the company's shareholders. The capital stock thus stands on the corporate books as a *liability* corresponding in part to its capital, which consists of certain assets. The capital stock is a liability of the corporation to its owners, the shareholders.

But the capital need not be exactly equal in value to the capital stock. At the commencement of the business, if the shareholders pay into the corporation an amount equal to the par value of the shares they take, it will be. But the prosecution of the business for which the cor-

poration was organized will cause the capital to diverge in value from the par value of the capital stock. Every profitable business transaction will increase the capital, and every unprofitable one will decrease it. Whenever the capital of the business exceeds its capital stock, a "surplus" appears. Whenever it falls below the capital stock, a "deficiency" arises. So that the surplus is merely the excess of the capital or net investment in the corporate business over the par value of its capital stock.

A surplus may arise in many ways. By fortunate speculation, by selling the corporation's securities—*i.e.*, its bonds and stocks—at a premium, etc. The most important source of the surplus, and the source which is commonly in mind in speaking of the term, is the prosecution of the corporation's legitimate business; *i.e.*, "current earnings." We usually think of the surplus as "undivided profits."

The surplus, then, is capital which is not represented by capital stock. It is, nevertheless, owned by the shareholders in the corporation. A share of stock, the par value of which is $100, does not mean merely that its holder has invested $100 in the corporation or that, in event of a dissolution, he would be entitled to $100 of its property; but, if there are a thousand such shares, it means that the holder of one share is entitled to one one-thousandth part of the entire capital of the corporation. If this turned out to be $125,000,—*i.e.*, if there were a "surplus" of $25,000,—each share would be worth $125. Thus ownership in the capital stock carries with it a proportional ownership in the corporation's surplus.

How may this surplus be distributed to the stockholders? One obvious method is to declare a dividend equal to the whole or a part of the surplus, and pay this in cash. The surplus is thus distributed in part to the stockholders in every cash dividend which the corporation declares, and

in every such dividend there is a direct distribution of the company's assets. But it is claimed that a stock dividend or a privileged subscription accomplishes the same result.

The effect of a privileged subscription may best be introduced by first considering the effect of a stock dividend. The latter consists in a distribution of the company's capital stock to its shareholders without any return to the corporate treasury from them,—a free distribution of capital stock. A cash dividend involves a distribution to the shareholders of a part of the company's capital, and therefore of a part of its surplus. A stock dividend, on the other hand, nominally increases the corporation's liability to its shareholders without increasing its assets, and thereby causes the surplus as such to disappear. There is in this, however, in so far as the *immediate* effect is concerned, no distribution of the company's assets to its shareholders. Indeed, the assets and *the corporate capital*, which is the important point in this connection, are left just as they were before the stock dividend was declared. The only change has been that the capital of the corporation has become more fully represented by its counterpart, the capital stock. In other words, the surplus has been capitalized.

There is, however, an important sense in which the stock dividend does distribute the surplus, although this distribution is indirect. The new stock which is issued in this way carries with it the same dividend privileges that attach to the old stock. Hence the dividend per share of stock remaining the same, the virtual effect of a free distribution of capital stock is to increase the total dividend and raise the *rate* of dividend on the basis of the old stock. This increase in the total dividend must be paid either out of current earnings from the accumulated surplus or "out of capital." In this sense the stock divi-

dend effects a distribution of a company's surplus, but it does not involve a *direct* distribution of corporate assets or of surplus.

So much for the stock dividend. There are three cases in the extension of a stock privilege; namely, the privilege may be extended at par, below par, or above par. In every case, like the stock dividend, the privileged subscription attends an increase in the capital stock of the corporation; but, unlike the stock dividend, this increase in the capital stock is accompanied by an increase in the assets of the corporation, and hence of its capital. The stock dividend caused a disappearance of the surplus, as such, due to the fact that the latter was capitalized. If a stock privilege is extended below par, the surplus will be reduced by an amount equal to the discount at which the new stock is issued.

Thus suppose that a company's capital is $125,000,000 and its capital stock is $100,000,000, leaving a surplus of $25,000,000. If 100,000 new shares are issued and offered to the stockholders at $80, the capital will be increased $8,000,000 as compared with an increase of $10,000,000 in the capital stock. The net result is a reduction of the surplus to the extent of $2,000,000, the amount of the discount on the new shares.

If the privilege is extended at par, the surplus will not be affected. Thus, in the above illustration, if the new shares had been offered at $100 instead of $80, the capital, as well as the capital stock, would have been increased by $10,000,000 and the excess of the former over the latter would have remained at $25,000,000; that is, since the assets increase equally with the capital stock, the surplus, which is the excess of the capital over the capital stock, remains the same. In like manner, if the privilege had been extended at a figure above par,—at, say, $125,—the cash receipts would have exceeded the increase in

the capital stock, and the surplus would have been increased.

In only the first case, then,—namely, the issuance of the new stock at a discount,—is there a reduction in the surplus. This, however, does not involve a direct distribution of the company's assets to its stockholders; but, as in the stock dividend, the surplus, to the extent to which it disappears, is merely capitalized. This analogy between the privileged subscription and the stock dividend, too, holds only in the case in which the new stock was offered to the shareholders at a discount.

But, like the stock dividend, again, there is a sense in which the privileged subscription involves an indirect distribution of assets. This arose in the former because the increase in the corporation's capital stock carried with it an increased claim for dividends without an increase in the investment, and therefore in the company's dividend-earning power. But, even where the investment in the corporate business is correspondingly increased, this will not necessarily carry with it a *proportionate* increase in the earning power of the corporation. The "law of diminishing returns" will begin to operate after a certain point has been reached in the development of a railway system, after which further outlays of capital will not bring corresponding increased earnings. Hence, even though a company issues its new stock at par, there is still this sense in which its surplus may be said thereby to be indirectly distributed to its stockholders.

There is a last sense in which the privileged subscription may involve an indirect distribution of the company's surplus, which may be illustrated as follows: Suppose that a corporation whose stock commands a high premium in the market wishes to raise $10,000,000, and that to procure these funds it issues 100,000 new shares at par when, by offering them in the open market, it could have

sold them at $125, and thus obtained the desired funds by issuing only 80,000 shares The extra 20,000 shares which the corporation chose to issue to its stockholders may, in a sense, be said to carry with them an unnecessary increase in claims for dividends, and thus involve an indirect distribution of the company's surplus.

With the railway companies that follow this practice, however, this course is not considered unnecessary. These privileges, by furnishing the stockholders with unusual opportunities for gain, serve to keep the company's stocks out of the market, to hold the stockholders to the company, and prevent that ever-shifting *personnel* of the shareholding body which is so detrimental to the interests of the railway system. A stockholding body whose *personnel* is rapidly changing is likely to have only a temporary and passing interest in the welfare of the corporation. The policy of such a company is likely to be determined by the momentary interests of its stockholders, and vacillating rather than far-sighted and consistent. For this reason, as is maintained by President Stuyvesant Fish of the Illinois Central, these stock privileges are really necessary.

To sum up, neither the stock dividend nor the privileged subscription involves a direct distribution of a corporation's surplus, but at most represents merely its capitalization, in whole or in part. Both indirectly may involve a distribution of the company's surplus in the fact that they are accompanied by increased claims for dividends without a proportionate increase in the earning power of the corporation; that is, the only way in which either device may distribute a company's surplus is through a *virtual* increase in the dividend rate, the first of the three methods mentioned by Professor Meade.

The second of the two questions is this: Is the privileged subscription a method of watering stock? There

are various meanings attached to the term "watered stock." With some a company's stock is watered when its capital stock exceeds its original investment; with others, when the capital stock exceeds the cost of duplicating the company's property. In this view a corporation's capital stock might contain no "water" at one time, but through a fall in the cost of producing its properties, "water" would creep into its capitalization, although not an additional share had been issued nor an asset sold or destroyed. Again, stock becomes watered if its value in the market falls below par.

In discussing the subject of stock-watering, it will be advantageous to distinguish two distinct cases: namely, (1) the procedure at the time the corporation is organized; (2) the effect upon the capitalization of various influences, such as cheapening cost of production or changes in the market value of corporate properties which come in subsequent to the organization of the company. However various the opinions concerning the effect of the second set of influences may be, it will be generally admitted that in the organization of a corporation, if the value of the property and cash paid in does not equal the par value of the shares issued, we have a case of stock-watering. It will also be admitted that, if the value of the property and cash paid into the corporate treasury in exchange for its capital stock does equal the par value of the shares issued, we do not at that time have a case of stock-watering. The capital—*i.e.*, the net investment—increases equally with the capital stock. This is the criterion which the ordinary man has in mind in passing judgment upon such a transaction.

It will further be agreed that, if at any time subsequent to the company's organization stock is issued, but paid for at less than its par value, another case of stock-watering arises. The corporate capital has not increased equally

with the capital stock. On the other hand, if new stock is issued and paid for at or above its par value, this transaction does not involve stock-watering. The corporate capital, or investment, *has* increased equally with its capital stock. This is the criterion by which the average man judges the effect of an *increase* of stock; namely, Has the capital, or investment, in the corporation increased at an equal pace with its capital stock?

Applying this criterion to the stock dividend, we should find that that device always involved a watering of stock; for it always consists in an increase in the company's capital stock without any increase whatever in its capital, or investment. The stock dividend may have one of three objects. It is sometimes declared instead of a cash dividend. Thus many times in the early history of the Reading Railroad, when large profits were being made, but when the company needed these funds for extensions and increased equipment, instead of paying out cash, it distributed dividends in scrip which was convertible into new stock. This saved the trouble of paying out cash and then taking it in again, also saving considerable time which might have been lost in trying to sell new stock in the market. In other cases the stock dividend may be used as a method of concealing the fact that dividends are really not being earned. In such cases the officials declare a dividend as usual, but, as in the preceding case, announce that the cash is needed for new equipment or for other purposes, and offer scrip or stock instead.

The second object of a stock dividend is to capitalize the accumulated surplus. The surplus has been defined above as the excess of the capital, or investment, in a corporate business over the par value of its capital stock. It is the part of the capital which is not represented by capital stock. But it *is* represented on the corporate books by a fictitious liability termed the "surplus account."

When the surplus is capitalized by means of free distribution of stock to the shareholders, this "surplus account" is wiped out and an increase in the "capital stock account" substituted for it. Occasionally a stock dividend is declared when there is neither an accumulated surplus nor a sum of net profits from which to pay a dividend. In such a case the purpose is either to conceal this lack of profits or purely to inflate the capitalization for speculative or other purposes.

The stock dividend is always a method of watering stock. Not so the privileged subscription. A privilege which is offered below par does, as seen above, involve stock-watering. Thus in 1900 the Baltimore & Ohio Railroad Company offered new stock to its shareholders at $80; but in this case the new stock would not have brought more than $75 if it had been sold on the market. Another notable instance of privileges offered below par was the Great Northern privilege of 1898, to which attention was called in Table IV. above. For some time the Great Northern management had been advancing funds for construction purposes out of its own earnings to the Seattle & Montana, a subsidiary company. These funds formed a legitimate surplus to the Great Northern; and, when in 1898 the Seattle & Montana Company gave the Great Northern its bonds in return, the latter company declared a bond dividend. But, instead of distributing these bonds themselves to its stockholders, the Great Northern Company increased its own stock 100 per cent., and offered the new shares at par to the holders of record. In payment for this new stock the Great Northern shareholders were credited by that company with 40 per cent. of their subscription price on account of the Seattle & Montana bonds which the Great Northern Company retained in its treasury, and only the remaining 60 per cent. of the subscription price was paid in cash. In

other words, the Great Northern Railway Company declared a dividend in bonds, and paid it in stock.

This transaction was equivalent to a stock dividend of 40 per cent. and a privileged subscription of 60 per cent. of recorded holdings at par. For although, as the management claimed, the funds which had been advanced to the Seattle & Montana Company would otherwise have been paid out in dividends, and the 40 per cent. credited upon the stockholders' subscriptions merely compensated them for dividends to which they had been entitled, but which they had foregone, nevertheless these funds had been put into the company's surplus; and in this transaction itself the capital stock was increased 40 per cent. without any increase in the company's assets or capital to correspond. This last consideration is the criterion, and in this illustration we have a genuine case of stock-watering.

Stock privileges that are offered below par are, however, few in number. Most privileges are offered at par, while a few, like the recent privilege extended by the Pennsylvania Railroad to its stockholders, are offered at a premium. In neither of these two cases, according to our criterion, is stock-watering involved.

The effect of a stock dividend is always to reduce the proportion of assets to liabilities, since the two are not correspondingly increased. The effect of a stock privilege, on the other hand, is sometimes to decrease this proportion, sometimes to increase it. This is especially true if the stock is offered at par; for, if the system has been over-capitalized, every new share issued at or above par tends to equalize the investment and the nominal capitalization, and the same applies to a system that has been under-capitalized. Thus, if the investment in a railway system was $90,000,000 and the capital stock issued was $100,000,000, the investment was $90 per

share. If now 250,000 new shares are offered at par, the investment becomes \$115,000,000 and the nominal capital \$125,000,000, representing an investment of \$92 per share. Here, in an over-capitalized system, the average investment per share is raised by \$2. On the other hand, if the investment had been \$125,000,000 and the capital stock \$100,000,000, the investment would have been \$125 per share; and, with the increase of 250,000 shares at par, the average would be reduced to \$120 per share.

While the privilege which is offered at or above par cannot, strictly speaking, be said to constitute stock-watering, it is, nevertheless, a very efficient method of concealing the real earnings of a railway system. In the first place the size of the returns from this source is not generally known. In the second place, since these privileges are usually offered at or above par, the fact is lost sight of that there is, in a sense, as shown above, an unnecessary increase in the claims upon the company to pay dividends. But since, as stated above, the tendency of this kind of privilege is towards the equalization of the investment in the system with its capitalization, this second consideration loses importance.

Thus, while the stock dividend will always be opposed as a method of stock-watering, the privileged subscription, so long as the privileges are not accorded at a figure below par, will be recognized as, on the whole, a legitimate method of increasing the capital stock and obtaining funds for the purposes of corporate expansion. This method is unquestionably legal; and, as long as the investment increases equally with the capitalization, there is not likely to be any serious opposition to its use.

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A PLANTATION EXPERIMENT.[1]

In a paper on "The Negro in the Yazoo-Mississippi Delta," read at the fourteenth annual meeting of the American Economic Association,[2] I briefly touched upon the conduct of a plantation in which I was interested. Because of a certain degreee of novelty attaching to some of the features which characterized the business relations between the plantation management and its negro labor, I felt justified in referring to these transactions as an "experiment." It is to a discussion of this experiment, six years after its inception, that the present paper is chiefly addressed.

An adequate supply of labor is the first essential in the business of raising cotton. To secure it constitutes the most serious problem confronting the plantation management. Not for forty years has the supply equalled the demand in the alluvial section of Mississippi. Here the negro still has almost a monopoly of the field of manual labor, though at last his supremacy has been threatened by the white man. So great is the annual competition among planters for negro labor that the latter is afforded opportunities for driving bargains superior to those possessed by any other class of agriculturists with which I have any acquaintance. There is absolutely no fixed basis among planters for making terms with labor, and in consequence contracts vary through a wide range of conditions. Any negro family, though it consist of only a man and his wife, and have not a dollar on earth, will be taken into partnership with the planter; for that is the real nature of the share contract. The planter will locate the family for the year in a comfortable house, on its proper allotment of as good land as can be found in America. He will fur-

[1] Dunleith Plantation is in Washington County, Mississippi, on the Southern Railway.

[2] Washington, D.C., December 27–30, 1901. *Papers and Proceedings*, pp. 235–278.

nish the land (which includes house, fuel, water, and garden free), seed to plant it, and team and implements with which to cultivate it. This is the planter's part, and against it the negro furnishes his labor, and agrees to make and gather the crop. The two divide whatever is raised, share and share alike. In addition the planter supplies the share-hand with food, clothing, tobacco, medicine, and medical attention. He does this from the day the family reaches the plantation until the day it decides to "move," or, rather, until the planter learns of such decision. He hazards his advances upon the sole security of the crop, and looks to the negro's share for his reimbursement.

In the paper to which I have referred I made this statement: "There is scarcely a planter in all this territory who would not gladly make substantial concessions for an assured tenantry. I do not mean for negroes who would stay with him always, and never take advantage of an opportunity for genuine betterment, but merely for such as would remain with him only so long as they were willing to work at all under the same conditions, and should receive honest and considerate treatment at his hands."[1] I would to-day, and with all possible emphasis, reiterate the assertion of three years ago.

It was to the desire and hope of building up some such "assured tenantry" that our experiment largely owed its inception. Its salient features were: uniformity of tenant system, all land being rented at a fixed cash rental; the sale of stock, implements, and wagons to tenants upon exceptionally favorable terms; the exercise of proper supervision over the crop; the use of a contract defining in detail the undertakings of each party; the handling and disposition of the gathered crop by the plantation management. Let there be no misunderstanding of the motives behind all this. There was nothing philanthropic about it. It was a business proposition, pure and simple, but certainly one with two sides to it. The plan was to select a number of negro families, offer them the best terms

[1] *Papers and Proceedings*, pp. 259, 260.

and most advantageous tenant relation, and so handle them and their affairs as to make them reach a condition approaching as nearly as possible that of independence. The hope was that, having accomplished this purpose, we would thereby also have in large measure solved the labor problem, having attached to the plantation by ties of self-interest a sufficient number of these independent renters to make us in turn measurably independent of the general labor situation. The problem before us was to place in the hands of these people the means of acquiring something for themselves, and then, in every instance of deficient individual initiative, by proper supervision make them acquire it.

The principal statistical features of the experiment during the five-year period which witnessed its beginning and its practical abandonment may be thus summarized.[1] We brought to the plantation, at the close of the season of 1898, 30 new families, and began the first year, 1899, with a total of 58. On 1,064 acres of cotton land we made but 459 bales of 500 pounds average, a family average of 7.9 bales. The average price received was 7.50 cents per pound; and the entire crop, cotton and seed, brought $21,663.88, or a family average of $373.51. Of the families on the place, 26, or 44.8 per cent., left at the end of the year. We moved in 27 families, and, with the 59 which the addition gave us, cultivated 1,048 acres of cotton in 1900. The crop was 817 bales, or 13.8 per family. It sold at an average price of 9.94 cents, and with its seed brought $47,541.66. This was an average cash product value of $805.79 per family.[2] The number of families who left the place at the close of the year was 13, or 22 per cent. of the total. We

[1] The number of persons to the average family remains practically stationary at about 3.7. See *Papers and Proceedings*, p. 269.

[2] The "cash product" value must not be confused with the total crop value shown for this year in "The Negro in the Delta," nor the total acreage given there with the cotton acreage shown above. It may be explained that the number of families given in the previous paper, 61, included 2 occupying somewhat anomalous tenant relations, who have been omitted here. The number of bales given here—817—is correct, instead of 818, as shown in the other paper. *Papers and Proceedings*, p. 269.

secured 15 new ones, and had on the place 61 families in 1901. We had this year in cotton 1,348 acres, and raised 1,270 bales, 20.8 to the family. At an average price of 7.90 cents for the cotton this crop, including seed, realized $60,742.04, being $995.77 per family. We lost 16 families this year, 26.2 per cent. of the whole force, and moved in 24 new squads, which gave us 69 for 1902. The latter year we raised 1,131 bales of cotton on 1,341 acres. Seed and cotton brought $54,593.26, the average price for the latter being 8.08 cents per pound. The average product of cotton was 16.4 bales per family, the average value of cotton and seed $791.20. At the end of the year we lost 17 families, 24.6 per cent. of the total, and moved in 23 for the following year. This gave us 75 squads for 1903. We cultivated 1,392 acres of cotton, and raised 741 bales, 9.8 to the family. This brought 11.77 cents per pound, the cotton and seed selling for $53,527.73, or an average of $713.70 per family. At the close of the season 31 families, 41.3 per cent. of our working force, left the plantation.[1]

During the period under review the tenant system of the plantation was changed from an exclusively rent basis to just as nearly an exclusively share basis as it was possible to reduce it. In the first two years the entire plantation was in the hands of renters, while of the cotton acreage in 1903 they worked but 54.6 per cent., and produced but 45.3 per cent. of the crop. This has been still further reduced, and of a total cultivated acreage of 1,577 in 1904 they worked but 465 acres, or less than 30 per cent. The number of families on the place increased from 58 to 75 during this period; the number renting fell from 58 to 36, a decline in per cent. of the total number from 100 to 48. Here, again, the renters lost still further in 1904, falling to 30 families out of 79,—a decline to less than 38 per cent. of the total. In 1899 they held 73 head of work stock, 94.8 per cent. of the total number on the place. This fell

[1] The above figures and others of more or less interest in connection with this discussion are given in a table appended to this article. For aid in compiling the data I wish to acknowledge my great indebtedness to my business associate, Mr. Julian H. Fort.

to 60 head in 1903, which was but 47.6 per cent. of the total. Here, too, there has been another decline, the 60 in 1903 having fallen to but 23 in 1904.

But the story of the decline of the renter on Dunleith Plantation—of the failure to accomplish what was at least hoped for under the system inaugurated in 1899—cannot be told in any statistical display, nor can the reasons which compelled the abandonment of the experiment be set forth in a column of figures. Back of the inception of the scheme was the desire to create a satisfied and satisfactory force of reasonably permanent tenants. Not that we were ever sanguine enough to hope to have them all in this category. We would have been satisfied with a group of 50 per cent. of the total, or even with less. It was hoped to accomplish our object by a direct appeal to self-interest. We demonstrated our ability to make independent, property-owning families out of poverty-stricken material. These families in turn demonstrated the fact of their independence by severing relations with us almost as promptly as we put them on their feet. After the termination of three years we had begun to feel reasonably certain that even the most practical appeal we could make to radically improved material welfare would be generally overcome by an apparently instinctive desire to "move." After the experience of five years we were quite satisfied of our entire incapacity to make the average plantation negro realize the remotest causal relation between stability and prosperity.

We were not surprised to have 26 families leave us the first year, nor were we especially concerned over the departure of 13 the second. It was not alone the number who left us each year, but likewise the increasing annual drain on the property involved in their departure that forced us to realize the utter impossibility as a business proposition of continuing our general system. In operating a plantation, stock and implements rank with labor as necessary complements. A cardinal feature of our plan involved the placing of the first two essentials in the hands of the latter. If the labor could be depended upon to remain on the

property under normal conditions a reasonable average length of time, this result would, of course, have been merely incidental to a successful conclusion of the experiment. If, however, the laborers proved conclusively that they could not be so depended upon, then to have continued to put the business at their mercy by giving them control over everything necessary to its conduct would have been extending a foolhardy invitation to ultimate disaster. It is bad enough to have to face a general exodus of labor, but such a contingency becomes doubly serious when it involves the loss of stock and implements as well. There are on the plantation to-day but two head of work stock that were there in 1899. What has transpired gradually, and without serious consequences, might easily have occurred in a single year with disastrous results, had we allowed the acquisition of stock by the labor to proceed far enough. I wish it understood that not the slightest obstacle is placed in the way of a tenant's acquiring implements and stock, but also that we no longer sell him these things on long time, nor do we otherwise personally encourage their purchase. We simply endeavor to fill the place of each departing renter with a sharehand, and try to confine such renting as we are compelled to do to such as come to us with stock of their own. In short, we are no longer engaged in the altruistic enterprise of converting shiftless and empty-handed negroes into desirable and well-equipped tenants for the temporary benefit of other planters.

From 1899 to 1903, leaving out of consideration the 30 new families brought in at the beginning of the former year, we moved in 124 families. In the same period we lost 103. Of the 79 families on the place in 1904 but 8 were with us in 1899. Of the 103 who have left, some with little, some with much, not one has become an owner of land. Most have simply continued as tenants elsewhere. Many have lost what they carried away, and have become sharehands on other plantations. Some have dropped into the ranks of day laborers. A few have drifted into towns.

Let me illustrate one of these removals. In December, 1900, we moved in a crew of 7 people. They all represented themselves as working hands, though one of the men was over sixty-five, with a wife past sixty. Their entire outfit consisted of a horse, worth at a liberal valuation $50, and $58 worth of miscellaneous and indescribable household effects. In December, 1903, while riding over the place one day, my attention was arrested by a procession slowly approaching me. It consisted partly of two wagons, one buggy, two mules, one horse, three cows, two calves, and five dogs,—the property of this same crew of seven. In addition they had with them outside wagons enough to assist them in hauling away 285 bushels of corn, $190 worth of household effects (including a sewing-machine for each woman and a gun for each man), and a half-dozen crates of hogs and several of poultry. During the three years they had paid rent and accounts amounting to $4,168.96, had received in cash $747.85, and had cash paid for help in their crops to the amount of $393.90. Their accounts, of course, included a variety of purchases in addition to their living expenses. They carried away $1,100 worth of personal property. They left to get rid of the supervision incident to plantation management, and removed a short distance to the property of a non-resident, and secured their advances from a merchant. In November last I learned that the head of the squad had applied to a neighboring planter for a location for 1905, and wanted the latter to lift a debt of $1,000 for him.[1]

Of those who have left I have said that it was not so much their number as their condition that concerned us. In this connection let us look into the condition of the thirty-one families who left us at the close of 1903. It may suggest itself to some that the single illustration just given cannot be typical of the possible consequences of the removal of a large number of renters at one time, but that it is

[1] Since the above was put in print this squad has returned to us to make a crop the present year. It surrendered all it had, save household effects, to its merchant, and in addition we advanced $75 to cover a balance. It begins where it started before, with nothing, and this time will work on shares.

an isolated instance, selected to prove a case. A study of the entire group of families who left that same year will also serve as a reply. Thirteen of these families were renters, and carried with them the following personal property:—

25 head of stock	$3,125.00
9 wagons	360.00
8 cows and calves	200.00
Implements	325.00
Household effects	650.00
1,400 bushels of corn	700.00
	$5,360.00

They also had between $800 and $900 in cash; but, as this is an estimate it is not included. One of these families had rented 23 acres of land, and had been paid a cash balance of $659.60. Another rented 25 acres, and drew a cash balance of $734.72. Of the 31 families 18 were sharehands, and had but $360 worth of property, and that in the shape of household effects. It is not difficult to see why the removal of the 13 renters was a more serious matter than the loss of the 18 sharehands.

We hear a great deal about the unequal distribution of wealth in this country, but I have always believed the wealth of the American negro to be more unequally shared than that of any other class of our population. Of course, these figures are too insignificant to be worth anything whatever in this connection, nor is this paper concerned with such a discussion. The remark is suggested, however, by a glance at the average holdings of these two groups of families. If we stop with the statement that 31 families owned $5,720 worth of property, we have the very fair showing of $184.51 per family. The actual distribution of their total holdings, however, gives the renters $412.30 per family, and the sharehands but $20. This inequality holds also with the 79 families on the plantation in 1904. They own, all told, $7,180 worth of property. This would be $90.88 per family. An analysis, however, shows that

30 renters own $177.33 per family, or $5,320 of the total. (This is within $40 of the exact amount taken away by the 13 renters in 1903.) Of the balance, $1,120 is held by 12 sharehands, an average per family of $93.33. The remaining $740 is made up of a distribution of $20 each to 37 sharehands, solely for household effects. But a further analysis shows a still more striking inequality. The 8 families who have been with us since 1899 constitute but little more than 10 per cent. of the total in 1904, but own more than 60 per cent. of the total property. They own $4,375 worth, or $546.87 per family.

While there is no question in my mind as to the cash rent tenancy being preferable, from the laborer's standpoint, to any form of métayer, yet I must not be understood as holding that all the advantages by any means accrue to the side of the former system. Earlier in this discussion I gave an entirely unexaggerated statement of what the planter will do in the way of "staking" the sharehand who comes to him with a capital consisting only of ability to work. Thanks to a crop lien law and a fertile soil, such a man can secure advances in my section of the country upon the sole security of the crop to be grown by him. He has the advantage over the renter of having the planter for a partner, and the latter takes all the risk. If disaster overtake him, the renter may lose his stock and implements, but the sharehand operates on another's capital. At worst he can lose but his labor, and for this he has in any possible contingency at least been sheltered, clothed, and fed. After all, the net results to the tenant depend far more upon his individual efforts and upon his habits, whether of extravagance or economy, than upon any fixed features incident to one system of tenure or the other. Upon every plantation are to be found sharehands who make just as much as do any of the renters, and the nature of whose tenant relation is entirely of their own choosing. A number of accounts could be adduced to illustrate the relative results of the two systems, but the personal equation is so large a factor as to impair the value of bare figures

for purposes of comparison. The two following are selected because they are accounts of families equal in all essential respects. They are for 1903, and are condensed as much as possible.

RENTER: 18½ ACRES (15½ IN COTTON, 3 IN CORN).

Debits.

Rent	$129.50
Merchandise	96.75
Stock feed	52.65
Blacksmith, doctor, and planting seed	25.58
Work in crop, picking and ginning	42.60
Cash	162.48
	$509.56

Credits.

Net proceeds of 8 bales of cotton, 4,543 pounds, and seed from same	$509.56

SHAREHAND: 18 ACRES (16 IN COTTON, 2 IN CORN).

Debits.

Merchandise	$91.85
Work in crop, picking and ginning	40.00
Cash	196.40
	$328.25

Credits.

One-half net proceeds of 10 bales of cotton, 5,327 pounds, and seed from same	$328.25

The renter made 75 bushels of corn, and the sharehand's half of his was 25 bushels. The sharehand made 333 pounds of lint cotton per acre, the renter 293 pounds. The latter was 27 pounds above the plantation average for the year, and 73 pounds above the average yield of renters. The sharehand's yield was 67 pounds above the average of the plantation and 15 pounds below the average sharehand's. The renter had three items on his account which the planter has to provide under a share contract,—namely, blacksmith, stock feed, and planting seed. The sharehand happened to have no doctor's bill. The renter drew $4.90 more in merchandise than the sharehand, but received $33.92 less cash. The renter owned two mules, a wagon,

and implements, which may be said to have represented his operating capital. He also owned a buggy. The share-hand operated with plantation stock and implements, but owned a riding horse and a cow.

In immediate bearing upon our experiment and as illustrating the gradual transition from a rent to a share system, the most significant figures in the appended table are those which show the stock owned by renters, those showing the rented acreage, and those giving the number of families renting, with per cent. of total number. There are other figures, however, of more or less interest in any general discussion of plantation economy. Take the acreage production of lint cotton, for example. The figures show a range of from 215 pounds to 471, and illustrate the fluctuations that may result from various combinations of yield and price. Their study will exhibit the ups and downs of the business,—its possibilities and its hazards. The most valuable lesson they offer is the heavy advantage shown to follow a large yield per acre.[1] In the figures showing the amount of cash advanced tenants each year on the two accounts of outside work in making their crops and in extra picking, we are dealing with two of the most important factors in the net results of the negro's crop. These two items are shown to have been $4.52 for each bale raised in 1902. Even if equally distributed, this would have imposed an average charge that year of $74.17 per family. But the amount of such assistance needed or demanded by the negro varies all the way from nothing up to enough to consume what would otherwise be handsome profits. These two items alone during this five-year period would have increased the cash balances to our tenants in the total sum of $15,248.90.

[1] The fluctuations of yield exhibited here were under conditions well-nigh absolutely uniform during the five years,—save in the one respect of weather. Cotton is essentially a "weather crop," and this truism points to the fallacy of most of the deductions and speculations founded upon the indicated yield of 1904. The most assured conclusion as to labor and other conditions, and the most solemnly announced prediction for ensuing years, may both be rendered absurd by too much, or too little, rain during the growing season, by two much while the crop is being saved, or by a killing frost too late in the spring, or one too early in the fall.

The transactions between the planter and tenant are frequently utterly devoid of any approach to a proper business basis. This is largely on account of the character of the labor, and rests partly on established custom and partly on the competition for hands. At all events, out of the combination of causes the negro manages to realize in much too large measure for his own good the gratification of his whims and pleasures. I have yet to know of one so deeply in debt or so far behind with his crop as to cause the least hesitation in the matter of demands for cash for the circus or excursion. But of all plantation customs the most pernicious, in my judgment, is that of advancing "Christmas money." This is just exactly what its designation implies. It is never asked for under any pretext of being devoted to some legitimate or substantial use. It is drawn for the sole and express purpose of promoting the pleasures of the holiday season, which begins, according to the recognized plantation calendar, several days before the 25th of December, and terminates several days after the 1st of January. I have never heard of a dollar of such money being diverted from its destined aim. It is spent in various and sundry ways, according to the individual estimate of what constitutes "a good time." A good part goes for railroad fare,—for "riding the train"; the saloon and the crap table receive more than their share; some goes for cheap finery and pinchbeck jewelry. We tried the experiment of putting this matter on a business basis in 1899. In consequence there was no "Christmas money," but we have put out our share since. The figures show the aggregate amount on this account to have been $3,034.70. This may seem small, but it should be considered in conjunction with the accompanying figures, showing the cash balances and advances during this same month each year. They show that in December during the five years there was advanced a total of $7,990.63 in addition to Christmas money. The items are placed in juxtaposition, so that the significance of the latter annual draft and waste may be the more readily appreciated. To illustrate further the

amount of cash handled by the negroes, the table also shows the cash balances and advances to them during the ginning season. This usually begins in September, and runs to January, February, or March, according to conditions. During these months there was paid our negroes, exclusive of advances while the crop was being grown, cash to the amount of $44,727.05, an average of $8,945.41 each year.

In concluding my earlier paper, to which in some sense this may be considered a second and final chapter, I said that it was impossible for me to judge fairly the effect upon our negro labor of the showing at that time exhibited. I may quote this statement: "To arrive at a just conclusion on this point, at least five years would be required, and only such tenants as removed to other places to continue the tenant relation could be considered in enumerating the removals. It would be manifestly unfair, in considering the extent and influence of a migratory, restless habit, to attribute to it such as were actuated by opportunity and desire to purchase land."[1]

We have before us an exhibit of the transactions of a somewhat longer period than the one suggested. As far as possible, it is confined to a bare statement of fact. It is entirely competent for any one interested in the subject to study the data presented and reason to his own conclusions. In judging how far it might be safe to generalize from a single plantation, the following suggestions may with some possible profit be borne in mind. The operations cover a period practically of six years, though all the crop data for the last year are not available. The number of families covered is 154, and of individuals affected more than 1,600. The negroes composing these families came from nearly every section of the South, every Southern State contributing, with the exception of Texas and Florida. The operations extend through years characterized by extremes both of yield and price, with an excellent general average of each. The plantation management was strongly biased in favor of the rent system at the beginning of 1899:

[1] *Papers and Proceedings*, pp. 271, 272.

it leans as strongly towards the share system at the close of 1904. The relations between management and tenants have been uniformly kindly and necessarily most intimate. In the main the families have been of good class, orderly, and well behaved, but one homicide having occurred among them during the six years. No one of the 103 families that have removed has undertaken the purchase of land. The average age of the heads of families has been about forty years. Of the 8 who have remained on the place during six years, 4 are over sixty-five, 1 over sixty, 2 over and 1 under forty.

To my mind, the most suggestive fact which these operations would seem to establish is, stated conservatively, that the attainment of a prosperous condition by the plantation negro does not influence him sufficiently to create an attachment for the local environment which accomplishes his material betterment. This seems to me true, unless the removals from such environment are at least in some considerable measure influenced by stronger appeals to intelligent self-interest than are offered by the conditions surrounding the initial improvement. This, of course, presumes the persistence of normal and friendly relations between tenant and management. I take it that in the case before us we are justified in eliminating at the outset, as one legitimate occasion of removal, if I may use the expression, the desire to become a land-owner, inasmuch as no attempt was made in such direction. In running down the list of recorded causes of removal, I find one, and but one, that can be placed in the class of appeals to self-interest, and then only by not insisting that such self-interest be intelligent. This was the case of several well-to-do renters who left us in 1902 because they were offered a reduction of land rent of one dollar per acre elsewhere. Upon its face such action cannot be criticised. As a matter of fact, it emphasized the operation of an unfortunate racial trait,—the thoughtless failure to distinguish between the simplest forms of real and fictitious advantage, the heedless pursuit of the shadow for the substance. The property

to which these people removed was run down, its houses were scarcely habitable, its drainage was poor, and there was not another family on it at the time. The reduced rent was a concession to necessity, yet the bait was seized as eagerly as though the hook were not visible to the foresight even of a child. Within a few weeks, whether prompted by characteristic vacillation or by the operation of returning common sense, I do not undertake to say, some of these families wanted to return to us.

It would be well-nigh impossible to enumerate the various causes, real and imaginary, behind the change of abode of the hundred and odd families who left us during these years. In several instances, hands left because we were unwilling to advance the amount of "Christmas money" to which they felt themselves entitled. Some departed with the rare frankness of a declaration that they "just wanted a change." Family troubles, the separation of husbands and wives, also account for their share. Still others went because of alleged dissatisfaction with the contract under which they had successfully been brought to a state of independence.[1]

In saying that I have long since abandoned the hope of fathoming the processes of the plantation negro's mind, I have "a conscience void of offence" toward these people, to whom I have never knowingly been guilty of an unjust act or word. I mean simply to give expression to the conviction, speaking of the average, of course, and not of the rare exception, that their actions have no logical or reasonable basis, that they are notional and whimsical, and that they are controlled far more by their fancies than by their common sense. Not that the negro is to be called upon to render to the world a reason for his every act,—to account to his critics for the motives behind his comings and his goings upon the earth. But the student of sociology and economics is interested to discover if it be true, as is

[1] In selling stock, our contract had required the renter to plant enough corn to provide sufficient feed. After a number had paid for their mules, they objected to this because corn is not a cash crop. One of the changes incident to the abandonment of our experiment was the discontinuance of our comprehensive contract, and the substitution of one of a dozen lines in the simplest possible form and terms.

so generally stated, that a certain large and distinct class of the world's laboring poulation is characterized by a restless, migratory tendency. This interest attaches to the general subject, whether the concrete illustration be drawn from the fields of the Southern States, from the diamond mines of Kimberley, or from the gold workings of the Rand. The matters and results treated in this paper merely offer cumulative evidence to the correctness of a largely entertained conviction. It is not maintained that they are a demonstration. But the fact does stand out that, in the matter of building up a group of reasonably permanent tenants, these negroes signally failed to respond to the influence of the most favorable economic conditions with which it was possible for a plantation to surround them. This much *is* demonstrated, and I account for it in two ways: first, on the hypothesis of a migratory instinct; second, on that of a characteristic easy-going indolence, which seeks freedom to assert itself, and chafes under restraints which measurably restrict its enjoyment. The negro race, in the mass, is charged with numerous faults and weaknesses. It is no purpose of mine to discover new ones or to magnify the old. I but give utterance to a sincerely entertained opinion, based upon many years of close personal observation, when I say that these traits to-day present the greatest obstacle to the real, general, permanent advancement of the race, whether in this country, Africa, or the West Indies. I have read a great deal about the negro's "love of home," and have heard much of the strength of his "local attachment," but in a not unkindly search I have been able to discover neither the one nor the other among the masses of the race. To my mind they are a restless people. Ever seeking change, they sometimes wander far afield, and traverse the boundaries of States in its pursuit. Again, like one lost in a forest, they move but in a narrow circle, yet always in the same vain, aimless quest. They have been wanderers since emancipation gave free play to native instinct, and I do not see how a love of home, in the real sense, could characterize a people who in the mass know so little of such an abode. Certainly, the plantation negro changes

his residence far too often for his children to form local attachments or to develop anything akin to such a sentiment. I have often been impressed with the peculiar significance which long usage has attached to the very word "home" among these people. It has come to mean no more than "house," and the two are synonymous terms. When the plantation negro starts out in quest of an abiding place for another year, he goes in search of another "home."

On November 26 last the principal of Tuskegee Institute gave to the press a statement which has been very widely reproduced and commented upon. It recited "the main complaints of the colored people," given to him "time and time again," as explaining their preference for the "uncertain existence" of cities and towns to "comparative prosperity upon a farm." I give them in full: "Poor dwelling-houses, loss of earnings each year because of unscrupulous employers, high-priced provisions, poor school-houses, short school terms, poor school-teachers, bad treatment generally, lynchings and whitecapping, fear of the practice of peonage, a general lack of police protection, and want of encouragement."

There is no intimation here of any possible fault or failing on the negro's part. Whether or not the really effective causes behind the urban drift observed by Mr. Washington in Georgia are essentially different from those behind migrations from place to place in the Mississippi Delta, we need not stop to inquire. My only suggestion is that not one charge in this comprehensive catalogue was ever laid at our door, yet somehow the fact of local drift and restless movement still remains with us an ever-present reality. And what I say for ourselves I can say likewise for scores of others. I do not say that the complaints recited are not real in some counties of the South. I do assert, however, that they fail to cover the ground. When the friend of the negro masses would know the whole truth behind the forces which to-day most militate against the material progress of the race, he must go deep below the surface of troubles which the white man can remove or rectify.

Dunleith, Miss. Alfred Holt Stone.

PLANTATION STATISTICS.

YEAR.	1899.	1900.	1901.	1902.	1903.
NUMBER OF FAMILIES.	58	59	61	69	75
Number families leaving and per cent. of total	26 44.8%	13 22%	16 26.2%	17 24.6%	31 41.3%
Cotton acreage	1,064	1,048	1,348	1,341	1,392
Bales (500 lbs. average)	459	817	1,270	1,131	741
Lint per acre	215	389[1]	471	421	266
Bales per family	7.9	13.8	20.8	16.4	9.8
Average price, cents	7.50	9.94	7.90	8.08	11.77
Value of cotton and seed	$21,663.88	$47,541.66	$60,742.04	$54,593.26	$53,527.73
Value per acre	$20.36	$45.36	$45.06	$40.71	$38.45
Value per family	$373.51	$805.79	$995.77	$791.20	$713.70
Stock of renters and per cent. of total on place	73 94.8%	76 85.3%	89 78.7%	77 64.7%	60 47.6%
Cash advanced for work in tenants' crops	$465.40	$513.90	$856.90	$741.40	$161.80
Cash for picking	$759.80	$1,536.10	$3,859.55	$4,376.40	$1,977.65
Cash for work and picking per bale	$2.66	$2.50	$3.71	$4.52	$2.88
Work and picking per family	$21.12	$34.40	$77.32	$74.17	$28.52
Christmas money	none	$375.00	$1,735.35	$473.85	$450.50
Additional cash advanced during December	$641.59	$2,378.58	$1,871.00	$1,163.95	$1,935.51
Total cash balances and advances during ginning season	$3,077.22	$12,747.14	$13,899.96	$7,436.39	$7,566.34
Average per family during ginning season	$53.05	$216.05	$227.86	$107.77	$100.88
Number families renting and per cent. of total	58 100%	59 100%	53 86.8%	45 65.2%	36 48%
Rented cotton acreage and per cent. of total	1,064 100%	1,048 100%	1,200 89.02%	884 65.9%	761 54.6%

[1] In a former paper the yield for this year was stated to have been 450 pounds. An error was made in the cotton acreage used as the basis of the calculation. The above is the corrected figure. The former was an isolated statement, and did not affect the accuracy of any other figures given at the time.

THE INHERITANCE TAX IN THE AMERICAN COMMONWEALTHS.

In the number of this *Journal* for August, 1904, Mr. Huebner published an article on the Inheritance Tax in the American Commonwealths.[1] At the time the article appeared the writer of this note was just completing a similar study. Mr. Huebner's work is so well done that little is left for another. However, it has seemed worth the while to supplement his published results at two points. A tabular statement of the inheritance tax legislation as it now stands will make it possible to ascertain all the important provisions of a given law without inconvenience, and a fuller examination of the financial significance of the tax may be desirable. This note is designed to supplement Mr. Huebner's excellent review of the development of the State inheritance taxes at these points.

In the accompanying tables, I*a* and I*b*, the classes of heirs, taxable property, exemptions and rates—these being the provisions of most importance—have been indicated. The object is not to summarize the development of the inheritance tax legislation, but to state the important provisions of the inheritance tax laws as they now stand.

To show these provisions conveniently, it has been necessary to divide the States into two groups. In the first group (I*a*) the heirs are divided into two classes, known as "direct" and "collateral," and treated accordingly. In the second group (I*b*) are five States which discriminate between three classes of heirs and apply rates to their shares graduated according to class. To these are added two States—North Carolina and Wisconsin—where the heirs are divided into five classes.

Inheritance taxes are now being collected in thirty of our commonwealths. In but one State—Alabama—has

[1] "The Inheritance Tax in the American Commonwealths," by Solomon Huebner, *Quarterly Journal of Economics*, August, 1904, pp. 529–550.

an inheritance tax, once legally collected, been abolished and not reintroduced. Laws enacted in New Hampshire and Minnesota have been held to be unconstitutional.[1] In fifteen of the thirty States referred to only the shares of collateral heirs and strangers in blood are taxed. In the other fifteen the shares of "direct" heirs are taxed as well, but usually at much lower rates.

Since Mr. Huebner completed his study, two States have enacted new laws, Ohio imposing a tax on "direct" heirs and Louisiana a tax on estates which have not borne their "just proportion of taxes."[2]

The legislature of Ohio in 1893 enacted a law placing a tax of three and one-half per cent. on the excess of estates over $1,000 in so far as they were succeeded to by persons other than lineal ancestors or issue, sons and daughters in law, brothers and sisters, and nephews and nieces. In 1894 the rate was increased to 5 per cent., and the exemption or deduction reduced to $200. At the same time a direct inheritance tax was instituted, the exemption and rates (for they were progressive) being more liberal. Direct heirs to estates of $20,000 or less were not taxed. Heirs to larger estates paid taxes according to the following scale of rates:—

Estates from	$20,000	to	$50,000	1 per cent.
" "	50,000	"	100,000	1½ " "
" "	100,000	"	200,000	2 " "
" "	200,000	"	300,000	3 " "
" "	300,000	"	500,000	3½ " "
" "	500,000	"	1,000,000	4 " "
" of	1,000,000	or more		5 " "

This direct tax was soon held to be void (in *State* v. *Ferris*,

[1] The new constitution adopted by New Hampshire in 1902 authorises the use of the inheritance tax. The Minnesota Act of 1902 (see Huebner, p. 539) was declared void, the 10 per cent. tax being in excess of the rate of 5 per cent., which was authorised by the State constitution. See *State* v. *Harvey*, 95 N. W. 764.

[2] At the time of writing a bill is pending in West Virginia which, if enacted into law, will divide heirs into four groups, as follows: (*a*) lineal issue and ancestors; (*b*) brother or sister of the decedent, grantor, etc.; (*c*) grandfather or grandmother of the same; and (*d*) all other persons, corporations, and institutions, save those exempted from taxation. The shares of the second, third, and fourth classes will be taxed at the rate of 5, 7½, and 10 per cent. respectively.

53 Ohio, 314) because of the discrimination involved in the classification of estates and the progression of rates. The act was held to be repugnant to the Bill of Rights, which declared that "government is instituted for the equal protection and benefit" of the people in whom "all political power is inherent," and to violate a section of the constitution requiring taxation to be uniform.[1]

The new law, approved April 25, 1904, has been held to be in accord with the constitution.[2] It provides that each heir shall pay a tax of 2 per cent. on such part of his distributive share as shall be in excess of $3,000. This, it is seen, is very much less radical than the measure enacted in 1894. Yet, with the exceptions of Wisconsin and Utah, no commonwealth taxes direct heirs as heavily.

Louisiana's use of the inheritance tax has been peculiar. As early as 1828 the legislature enacted a law providing that foreign heirs—that is, persons "not being domiciled in this State, and not being citizens of any State or Territory in the Union"—should pay a tax of 10 per cent. on all sums or on the value of all property they might succeed to, situated within the State. This law was repealed in 1877, only to be re-enacted in 1894.[3] In 1897, after having been declared to be unconstitutional, so far as the citizens of certain countries were concerned, because in contravention of treaty rights, the act as a whole was declared invalid because it had originated in the Senate instead of in the House of Representatives, where, according to the Constitution, such measures must have their origin.[4]

The new law, approved June 28, 1904, is of interest chiefly because it has been given shape by the so-called "back-tax argument." The constitutional convention incorporated in the new constitution of 1898 the following provisions:—

ARTICLE 235. The legislature shall have power to levy, solely for the support of public schools, a tax upon all inheritances, legacies, and

[1] Section 2 of Article XII.

[2] *State* v. *Guilbert*, 71 N. E. 636. (Opinion dated June 7, 1904.)

[3] Act approved July 11, 1894.

[4] Succession of Givanovich, 24 So. 679.

donations, provided no direct inheritance or donation to an ascendant or descendant below ten thousand dollars in amount shall be so taxed; provided, further, that no such tax shall exceed 3 per cent. for direct inheritances and donations to ascendants or descendants, and 10 per cent. for collateral inheritances and donations to collaterals or strangers; provided bequests to educational, religious, or charitable institutions shall be exempt from this tax.

ARTICLE 236. The tax provided for in the preceding article shall not be enforced when the property donated or inherited shall have borne its just proportion of taxes prior to the time of such donation or inheritance.[1]

This curious piece of special legislation by the constitutional convention has been made into law. The rates and exemptions are those mentioned in the constitution, and the tax is to be collected on those estates which have not borne their "just proportion of taxes." To make the law effective (and perhaps it will not be), it is made the duty of the "judges throughout the State exercising probate jurisdiction to require satisfactory proof that the succession or estate is not liable to the inheritance tax before they shall grant a discharge to the administrator," and before they shall grant an order placing the heirs in possession. For the first time do we have an inheritance tax law drawn logically in line with the faulty "back-tax argument."

Turning to the financial significance of the inheritance tax, Mr. Huebner has shown that the aggregate of revenues derived from it by the several States has grown rapidly since 1885.[2] Yet an examination of the returns for the several States shows that the yield is in but few instances large. In Table II. will be found a fairly complete statement of the revenue derived from this tax by the several States since 1885. Leaving out of consideration Wisconsin and Ohio, where because of recent legislation the nor-

[1] No authority is found for Mr. Huebner's statement (p. 543) that the tax "can be imposed only on such *personal* property as has escaped its burden of taxation."

[2] The following table (Huebner, p. 546) shows the total revenue derived from State inheritance taxes for the years indicated:—

1885	$944,335
1890	1,886,509
1895	4,016,841
1900	7,421,645
1901	7,591,438

mal yield is as yet unknown, in only ten States does it exceed $100,000.[1] In but two of these, New York and Pennsylvania, does the revenue exceed a million dollars per year; and in only two other States, Massachusetts and Illinois, does it approach five hundred thousand dollars.

But such general statements mean little. In Table III. will be found a statement of the average revenues per capita and the percentage these form of the total revenues of most of the Commonwealths for a period of years. The largest per capita revenue is found in New York, where for the three years 1901–03 it was on the average 48.73 cents. In but seven of the other States noted did it yield as much as ten cents per capita, while in six States it produced less than five. New York during this period obtained about 12 per cent. of her State revenue from this source. Three other States obtained more than five, the others less than five per cent. of their revenues from inheritance taxes.

A comparison of the returns from our taxes on successions with those of some foreign countries still further emphasizes the low productivity of the former. Table IV. shows the fiscal importance of the taxes on gifts and successions, and the per capita revenue derived therefrom in Great Britain, France, and some of the Australian States and Canadian provinces. Comparison between Tables III. and IV. shows the per capita revenues to be much larger in Great Britain, France, Victoria, and South Australia than in any American State. The great differences are not explained by differences in the amount of wealth and in the amount transferred by will or otherwise. Most of the differences in per capita wealth are slightly in our favor.[2]

[1] Massachusetts, Connecticut, New York, New Jersey, Pennsylvania, Illinois, Michigan, Iowa, Missouri, and California.

[2] The estimates of wealth per capita here given would warrant placing these countries in the following order:—

United Kingdom	$1,197 (Mulhall, 1888) 1,336 (Giffen, 1882)
United States	1,236 (Treasury Department, 1900)
Victoria	1,126 (Coghlan, 1901)
South Australia	1,092 (Coghlan, 1901)
France	1,000 (de Foville)

The explanation is found in the more drastic character of the inheritance tax legislation and the superior administration in the foreign countries.

In Great Britain there are a number of "death duties." The most important of these is the "estate duty" levied upon the market value of all property, real or personal, whether succeeded to by direct or other heirs, estates worth less than £100 being exempted. The rates are progressive, varying from 1 per cent. for the first class (£100 to £500) to 8 per cent. for the twelfth class (£1,000,000 or over). To this is added a "settlement estate duty" of 1 per cent. on "settled property." Estates exceeding £1,000 pay, in addition to the estate duty, a legacy duty upon personal property and a succession duty upon real estate going to collateral heirs and strangers in blood. In effect these two taxes constitute an additional collateral inheritance tax falling upon heirs other than lineal issue and ancestors. The collateral heirs are divided into four classes;[1] and the rates are 3, 5, 6, or 10 per cent., according to the degree of relationship.

In France as the law was amended in 1901 and 1902[2] estates of 1,000 francs and over are taxed according to the relationship of the heir and the net value of the property received by him. Heirs are divided into seven classes, and the rates vary both with the amount of the inheritance and the degree of relationship. Thus on shares of from 1,000 to 2,000 francs they range from 1 per cent. for descendants to 15 per cent. for remote relatives and strangers in blood. The shares are classified according to size,—there being twelve classes in all,—and the rates caused to progress to 5 per cent. for descendants and 20½ per cent. for remote relatives and strangers in blood.[3]

[1] (a) Brothers and sisters and their descendants; (b) uncles and aunts; (c) great uncles and aunts; and (d) other persons.

[2] Mr. Huebner's statement of the law does not include the amendment of 1902. That amendment divided shares of more than 1,000,000 francs into five classes, and carried the progression of rates to a higher point. *Cf.* Huebner, p. 549, and Bastable, *Public Finance*, 3d edition, p. 603.

[3] A full statement of the classes of heirs and rates may be found in Bastable, *Public Finance*, 3d edition, p. 603.

In Victoria estates below £1,000 are not taxed, and those between £1,000 and £5,000 are taxed on the excess over £1,000. Estates are divided into thirty-eight classes, the last consisting of those exceeding £100,000. The rates progress from 2 per cent. on the first class (£1,000 to £5,000) to 10 per cent. on the last class.[1] The widow, children, and grandchildren of the deceased pay one-half of the above rates. This amounts to a progressive direct inheritance tax of from 1 to 5 per cent., and a collateral tax of from 1 to 10 per cent., with an exemption of £1,000 and a deduction of a like amount from estates below £5,000.

In South Australia heirs are divided into three classes. The surviving husband or wife and lineal descendants and ancestors pay rates varying from 1½ per cent. on shares of from £500 to £700 to 10 per cent. on shares of £200,000 and upwards. Collateral heirs pay rates varying from 1 per cent. on shares under £200 to 10 per cent. on shares of £20,000 and upwards. Strangers in blood pay a uniform rate of 10 per cent.[2]

By comparing the provisions of these laws and of those set forth in Tables I*a* and I*b*, we can readily account for most of the differences in revenue produced. In all four of these instances direct as well as collateral heirs are taxed. In half of the American Commonwealths using the tax it is limited to collateral heirs and strangers in blood. By far the greater part of property descends to direct heirs. Taxes on direct heirs at low rates are more productive than taxes on collateral heirs at higher rates. Unfortunately, it has been possible to separate the taxes paid by the two classes of heirs in the State of New York alone. In that State a direct inheritance tax of 1 per cent. on *personal* estates in excess of $10,000 has yielded from one-third to more than three-fourths as much revenue as a collateral inheritance tax of 5 per cent. on both real and personal

[1] A complete statement may be found in Coghlan, *A Statistical Account of Australia and New Zealand*, 1902–1903, p. 798.

[2] *Ibid.*, pp. 799–800.

estates in excess of $500.[1] The successions and donations to lineal relatives and husbands and wives in France in 1896 aggregated 5,132 million, to others 1,327 million francs. The revenue collected was 85,809,934 francs from direct, 117,577,335 francs from other heirs and donees.

Again, in many of our Commonwealths the classifications of heirs are very much more liberal than in these four foreign countries, where the taxes are more productive. In Great Britain only the surviving husband or wife, lineal issue, and ancestors are exempted from the legacy and succession duties; in South Australia these, and in Victoria widows, children, and grandchildren, pay the lower rates; while in France at present the lowest rates are extended to descendants alone. An examination of Tables I*a* and I*b* shows that in nine[2] States "direct heirs" are surviving husband or wife, lineal issue, and ancestors only; in two,[3] these and sons and daughters in law; in two,[4] these and brothers and sisters; in twelve,[5] these and both brothers and sisters and sons and daughters in law; while in two more[6] the class is even more elastic.

The relatively small revenue in a few of our States is explained in part by the fact that only personal property is taxed. This is true of the tax in its entirety in North Carolina, of the direct taxes in Michigan and Montana.[7]

The small yield of our taxes is explained in part by the further fact that many of the exemptions are comparatively large. As a rule, this is not true of the exemptions accorded

[1] The following statistics are typical of the revenue in New York:—

Year.	*Revenue from direct tax.*	*Revenue from collateral tax.*
1896	$776,195	$1,265,978
1897	941,119	1,227,017
1902	878,297	2,425,258

[2] Arkansas, Connecticut, Iowa, Maryland, Missouri, North Dakota, Pennsylvania, Washington, and West Virginia.

[3] Maine and Vermont.

[4] North Carolina and Virginia.

[5] California, Colorado, Illinois, Massachusetts, Michigan, Montana, Nebraska, New Jersey, New York, Oregon, Tennessee, and Wyoming.

[6] Delaware (tax applies to strangers in blood only) and Ohio.

[7] Most of the laws which formerly applied to personal property only have been declared unconstitutional, or, as in New York (in 1903), have been amended. See Huebner, p. 535.

collateral heirs. However, in North Carolina collateral heirs are not taxed on estates below $2,000; in Massachusetts, $10,000; in North Dakota, $25,000. In Connecticut and Utah a uniform exemption is fixed for both classes of heirs, the amount being $10,000.[1] The exemptions accorded direct heirs in this country are comparatively large. In Great Britain it is £100; in France, 1,000 francs; in South Australia, £500; in Victoria, £1,000. Direct heirs in the majority of the American Commonwealths, on the other hand, are taxed on the excess of estate or share over $10,000 or those under $10,000 are not taxed. In Michigan only the shares of personal property over $25,000 are taxed; in Illinois, the excess of the share over $20,000. In Ohio the heirs are taxed on the excess of their shares over $3,000; in Oregon, $5,000; in Montana, $7,500; in North Carolina, $2,000,—the tax being collected in the last two mentioned States upon personal property only.

The net result of the non-taxation of direct heirs in half of the States, of making the class of direct heirs very inclusive, of discriminating in favor of real estate, and of the numerous large exemptions, has been to limit the inheritance tax to a comparatively few estates.[2]

A further examination of Tables I*a* and I*b* will show that the rate of the tax on successions is in many instances comparatively low. In Great Britain the rates for direct heirs are graduated from 1 to 8 (or even 9) per cent.; in France and in Victoria, from 1 to 5 per cent.; in South

[1] The last Massachusetts Tax Commission found that an exemption of estates not exceeding $10,000 would reduce the taxable principal almost 20 per cent. See *Report of the Commission on Taxation*, 1897, p. 98.

[2] The number of taxable estates in New York for some years has been:—

1895	2,682	1900	2,818
1896	2,624	1901	3,059
1897	2,556	1902	3,277
1899	2,721	1903	3,769

The number of taxable estates in Iowa in 1902 was 319; in Montana for the four years 1898 to 1902, 96. This is about one taxable estate per year to each 2,400 persons in New York, one to 7,000 in Iowa, and one to 10,130 in Montana. In Great Britain the number of taxable estates in 1900 was 67,338, or one to each 620 of the population. A comparison with the number of inheritances and donations reached by the tax in France is misleading. *Cf.* Huebner, pp. 546, 547.

Australia, from 1½ to 10 per cent.[1] Among the American Commonwealths Wisconsin alone makes use of graduated rates for direct heirs. They are from 1 per cent. on the first $25,000 to 3 per cent. on the excess over $500,000.[2] Of the other fourteen States collecting direct inheritance taxes, seven[3] have the rate of 1 per cent., three[4] 2 per cent., Louisiana 3 per cent., Utah 5 per cent., North Carolina three-quarters of 1 per cent., and Connecticut one-half of 1 per cent. These low uniform rates, with the large exemptions noted above, should not bear heavily upon the widows and orphans.

When we turn to the other heirs, we find they are required to pay progressive rates varying from 1 to 19 per cent. in Great Britain, 3¾ to 20½ in France, 2 to 10 in Victoria, and from 1 to 10 per cent. in South Australia. Twenty-three of our Commonwealths have uniform rates for collateral heirs and strangers in blood. The rate of 5 per cent. obtains in eighteen of these.[5] In North Dakota the rate is 2 per cent., in Maryland and West Virginia 2½ per cent., in Maine 4 per cent., and in Louisiana 10 per cent. Seven States make use of graduated rates, five for remote relatives and strangers in blood only, two for less remote relatives as well. In Illinois, Nebraska, and Oregon, uncles, aunts, nephews and nieces, and their descendants, pay 2 per cent.; in Colorado, 3 per cent. A third class of heirs pay rates graduated from 3 to 6 per cent. In North Carolina three classes of collateral heirs pay 1½, 3, and 4 per cent. Distant relatives and strangers in blood pay graduated rates of from 5 to 15 per cent. the tax resting on personal property only. Collateral heirs in Washington pay graduated rates of 3, 4½, and 6 per cent., more distant relatives and strangers in blood twice as much. And, finally,

[1] For the rates in numerous other foreign countries see Huebner, pp. 549–550.

[2] The rates are applied to the fractional part of the given estate falling within each class.

[3] Illinois, Michigan, Montana, Nebraska. New York, Oregon, and Washington.

[4] Ohio, Wyoming, and Colorado.

[5] Arkansas, California, Connecticut, Delaware, Iowa, Massachusetts, Michigan, Missouri, Montana, New Jersey, New York. Ohio, Pennsylvania, Tennessee, Utah, Vermont, Virginia, and Wyoming.

in Wisconsin the rates for other than direct heirs vary from 1½ to 15 per cent.

From this comparison it is seen that the direct inheritance tax rates in this country are comparatively low, the collateral inheritance tax rates fairly high, except on the largest estates, when graduated rates are not used, and in those instances where the exemptions are very large.

A few words may be added concerning the proper place of the inheritance tax in the tax systems of our Commonwealths. How much revenue should be obtained from this source must be determined in the light of the fiscal needs of the State and the comparative goodness of the tax. The fiscal needs of the States are great. At present any movement towards radical reform of the tax system by abolishing the general property tax and separating the sources of State and local revenue is held in check in most of our Commonwealths by the difficulties involved in getting suitable sources of State revenue. The fiscal needs in almost all instances are such that a large revenue should be drawn from this source if it can be done with a fair degree of justice and without working injury.

The inheritance tax has most of the marks of a good tax. Experience shows that it can be made to yield a large revenue. This is collected at small expense. The problems of administration are comparatively simple, and evasion comparatively difficult. Absence of shifting makes it possible to place the burden where it is desired that it should rest. It is possible to arrange the details so as to make the tax equitable, as taxes go. Its tendency to suppress and to destroy the basis upon which it is levied is comparatively slight, at any rate if the burden placed on near relatives is not great. In other words, though the tax rests upon accumulated wealth, it does not necessarily discourage accumulation to any great extent. It is conveniently paid in the vast majority of instances. And, finally, though it should not be changed frequently to obtain more or less revenue as needed, it is a fairly reliable source of income. It is true that in many instances the

yield has varied greatly from year to year; but, as the tax becomes more general in its application, this irregularity tends to disappear. The inheritance tax is thus a good tax from the fiscal point of view. It also has possibilities for controlling the distribution of wealth, though the advisability of using it to any great extent for this purpose is doubtful.

The revenue from the inheritance tax being greatly needed, and the tax a desirable one, how should the laws be shaped, constitutional limitations aside, so as to obtain the proper amount of revenue from this source?

From the point of view of the tax-payer, upon whom the burden of the tax rests, real estate (assuming due time for the collection of taxes) adds to his ability to contribute to the support of government, and is in the same sense an unearned income, as is personal property. The tax should be levied upon real estate as well as upon personal property, though in some instances there may be good reason for placing a higher rate upon the latter because it is prone to evade taxation under the general property tax.

All heirs who are placed in better position to contribute to the support of the State should be taxed. The heirs not dependent upon the deceased have greatly increased ability because of the accidental and fortuitous character of the income, and because it is not, as a rule, in any way a return for time and effort spent. Heirs other than surviving wife or husband and lineal issue and ancestors are usually not in a dependent or a contributory relation to the deceased, and therefore should be taxed on that to which they succeed. In many instances the surviving husband or wife, issue, and ancestors likewise profit by the decease and succession; and the property is to no great extent the product of their effort. They have tax-paying ability which should be reached. On the other hand there are numerous instances in which this is not true. But, inasmuch as the revenue is needed, and the State cannot deal with individuals in such matters, except as members of a class, it seems best to tax all direct heirs. The tax should be gen-

eral, resting upon direct as well as upon collateral heirs and strangers in blood.

But it is clear from what has been said that good reason exists for classifying heirs and favoring some as against others. That is, some have contributed to the upbuilding of the estate inherited or are dependent upon the the deceased: others have not contributed, and are not dependent. By discriminating between surviving husband or wife, lineal issue and ancestors, on the one hand, and all other heirs, on the other, a fairly just line is drawn. In the majority of our Commonwealths the favored class of heirs should be contracted. Whether a distinction should be made between certain collateral relatives and more remote relatives and strangers in blood, as some of our States do, is a question. An intermediate class for brothers and sisters, and uncles and aunts, and their descendants, may serve to prevent their being placed in the class of "direct heirs"; but it is difficult to show that as a class they are much less able to pay taxes on their shares than are the other heirs, and such discrimination adds to the difficulties of administration and diminishes the productivity of the tax. On the whole, it may be well to provide such an intermediate class; for it will prevent the working of hardship in some cases. But the twofold and threefold classifications of heirs which generally obtain in this country are to be preferred to those more refined classifications now frequently met with. The provision of numerous classes is not necessary to obtain substantial justice.[1] Our practice with reference to the number of classes is to be commended, but the limits of the several classes are so made as to place too many in a favored position.

As to exemptions, those granted to persons other than direct heirs should be for purely administrative reasons, and therefore very small. Those granted to direct heirs should be large enough to avoid working hardship in any instance. Ten or twelve thousand dollars is not too large. The exemption should apply to the share received by each

[1] See West, *Inheritance Tax*, pp. 127, 128.

heir rather than to the estate as a whole, and a deduction should be granted on larger shares, so as to avoid injustice as between heirs.

And, finally, as to the rates which should obtain. For the same reason that the exemption accorded direct heirs should be large, the rate on the smaller taxable shares going to them should be small, say 1 per cent. The ability of other heirs to pay taxes is greatly increased, and (assuming three classes of heirs) the lowest rates might well be as much as 4 per cent. for brothers and sisters, uncles and aunts, and their descendants, and 6 per cent. for more distant relatives and strangers in blood. The rates should be progressive. Ability increases more rapidly than the amount of the share. Furthermore, heavier taxation of the larger shares encourages a more general distribution of the estate. The progression of rates might cease at 5 per cent., or, if fiscal needs were great, at 10 per cent., in the case of direct heirs; at 12 and 15, or 15 and 20 per cent. in the case of other heirs, according as they belong to the second or the third class. The progression should be sufficiently rapid to bring the maximum rate into use when the share exceeds $500,000. To avoid injustice, it would be well to have the higher rates apply to the fractional parts of the distributive share falling within the limits of the several classes.

The suggested provisions are somewhat less radical than those now obtaining in the British and the French succession taxes. Were they adopted, and more attention given to the details relating to tax administration, the revenue produced would be materially increased, and would stand as an important item among the treasury receipts.

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TABLE I*a*.—PROVISIONS OF STATE INHERITANCE TAX LAWS.

(STATES DIVIDING HEIRS INTO TWO CLASSES.)

STATE.	Direct Inheritance Tax.			Collateral Inheritance Tax.		Notes.
	"Direct heirs" are parents, husband or wife, lineal descendants, including adopted children, and others indicated below.(1)	Tax upon estates as indicated.	Rate (per cent.).	Others taxed upon estates as indicated.	Rate (per cent.).	
Arkansas . .	As stated above.	Not taxed.	—	Estates without exemption.	5	(1) Abbreviations used: Grf. and grm. = grandfather and grandmother. Bro. and s. = brother and sister. S. and d. in law = son and daughter in law. N. and n. = nephews and nieces.
California . .	And bro. and s. and s. and d. in law.	Not taxed.	—	Estates of $500 or more.	5	
Connecticut .	As stated above.	Excess of estate over $10,000.	½	Excess of estate over $10,000.	5	
Delaware . .	(2)		—	Estates of more than $500.	5	(2) Applies to strangers in blood only.
Iowa	As stated above.	Not taxed.	—	Estates of $1,000 or more.(3)	5	(3) So interpreted in *In re McGhee's Estate*, 74 N. W. 695, and in more recent decisions.
Louisiana . .	Law does not specify.	Shares of $10,000 or more.(4)	3	(4)	10	(4) To be collected from estates not having borne their "just proportion of taxes." Used by parishes for school purposes.

Maine . . .	And s. and d. in law.	Not taxed.	—	Excess of distributive share over $500.(5)	4	(5) So interpreted in *State* v. *Hamlin*, 86 Me. 495.
Maryland . .	As indicated above.	Not taxed.	—	Estates of $500 or more.	2½	
Massachusetts	And bro. and s. and s. and d. in law.	Not taxed.	—	Estates over $10,000, shares under $500 being exempted.	5	
Michigan . .	And bro. and s. and s. and d. in law.	Shares of personal property, if $20,000 or more.	1	Estates over $100.	5	
Missouri . .	As stated above.	Not taxed.	—	Estates without exemption.	5(6)	(6) Progressive rates are unconstitutional. *State* v. *Switzler*, 45 S. W. 245.
Montana (7) .	And bro. and s. and s. and d. in law.	Personal estate where not less than $7,500.	1	Estates of $500 or more.	5	(7) Counties retain 40 per cent. of the revenue.
New Jersey .	And bro and s. and s. and d. in law.	Not taxed.	—	Estates of $500 or more.	5	
New York . .	And bro. and s. and s. and d. in law.	Estates of $10,000 or more.	1	Estates of $500 or more.	5	
N. Dakota .	As stated above.	Not taxed.	—	Excess of estates over $25,000.	2	
Ohio	And bro. and s., s. and d. in law, and n. and n.(8)	Excess of shares over $3,000.(9)	2	Estates of $200 or more.	5(10)	(8) Nephews and nieces on decedent's side only. *In re Bates' Estate*, 70 N. E. 625. (9) Act approved April 25, 1904. (10) Counties retain 25 per cent. of the revenue.

TABLE I*a*.—*Continued*.—(STATES DIVIDING HEIRS INTO TWO CLASSES.)

STATE.	Direct Inheritance Tax.			Collateral Inheritance Tax.		Notes.
	"Direct heirs" are parents, husband or wife, lineal descendants, including adopted children, and others indicated below.(1)	Tax upon estates as indicated.	Rate (per cent.)	Others taxed upon estates as indicated.	Rate (per cent.).	
Pennsylvania,	As stated above, except that adopted children are excluded.	Not taxed.	—	Estates of $250 or more.	5	
Tennessee . .	And bro. and s. and s. and d. in law.	Not taxed.	—	Estates of $250 or more.	5	
Utah	No distinction between heirs.	Excess of estate over $10,000.(11)	5	See preceding.	—	(11) So interpreted in *Dixon* v. *Ricketts*, 72 P. 947.
Vermont . . .	And s. and d. in law.	Not taxed.	—	Estates of $2,000 or more.	5	
Virginia . .	And grf. and grm. and bro. and s. and their descendants.	Not taxed.	—	Estates without exemption.	5	
W. Virginia(12)	As stated above.	Not taxed.	—	Estates of $100 or more.	2½	(12) The present legislature has had under consideration a bill grouping collateral heirs into three groups and taxing their shares at 5, 7½, or 10 per cent.
Wyoming . .	And bro. and s. and s. and d. in law.	Excess of estate over $10,000.(13)	2	Estates of $500 or more.	5	(13) The law states, however, that the "provisions of this chapter shall not apply to *bona fide* residents of this State when they shall possess the relation of husband or wife or children of deceased, and where the valuation of the property does not exceed the sum of twenty-five thousand dollars to each legatee." This discrimination perhaps violates the Constitution of the United States. Cf. *In re Stanford's Estate*, 54 P. 259.

TABLE Ib.— PROVISIONS OF STATE INHERITANCE TAX LAWS.

(States Dividing Heirs into More than Two Classes.)

State.	Direct Heirs.			Collateral Heirs.			Other Heirs.	Notes.
	Husband or wife, ancestors, lineal issue, brothers and sisters, sons and daughters in law.	Tax collected upon.	Rate (per cent.).	Uncles and aunts, nephews and nieces, and descendants.	Tax collected upon.	Rate (per cent.).	Taxed on shares at rates indicated.	
Colorado .	As stated above.	Excess of share over $10,000.	2	As stated above.	Excess of share over $500.	3	Shares:— $500 to $10,000, 3%; $10,000 to $20,000, 4%; $20,000 to $50,000, 5%; $50,000 or more, 6%(1)	(1) So interpreted in *Burns* v. *Elder*, 77 P. 853, where the law was held to be constitutional.
Illinois . .	As stated above.	Excess of share over $20,000.	1	As stated above.	Excess of share over $2,000.	2	As in Colorado.(2)	(2) The laws of Colorado, Nebraska, and Oregon were copied with some changes, from the Illinois Act of 1895.
Nebraska .	As stated above.	Excess of share over $10,000.	1	As stated above.	As in Illinois.	2	As in Colorado.	
Oregon . .	As stated above.	Excess of share over $5,000 estates below $10,000 exempted.	1	As stated above.	As in Illinois.	2	As in Colorado.	

TABLE I*b*. — *Continued.* — (STATES DIVIDING HEIRS INTO MORE THAN TWO CLASSES.)

STATE.	Direct Heirs.			Collateral Heirs.			Other Heirs.	Notes.
	Husband or wife, ancestors, lineal issue, brothers and sisters, sons and daughters in law.	Tax collected upon.	Rate (per cent.).	Uncles and aunts, nephews and nieces, and descendants.	Tax collected upon.	Rate (per cent.).	Taxed on shares at rates indicated.	
Washington.	Parents and lineal descendants.	Excess of estate over $10,000.(3)	1	Collateral relatives to the third degree.	Shares:— Below $50,000, $50,000 to $100,000, 100,000 or more,	3 4½ 6(4)	Classes of shares the same. The rates twice as high as in preceding.(4)	(3) So interpreted in *State* v. *Clark*, 71 P. 20. In this decision the law was held to be valid. (4) The higher rate is collected upon excess of share over maximum of lower class.
North Carolina . .	Five classes of heirs taxed upon shares of personal property in excess of $2,000 at rates indicated:— (*a*) Ancestors, lineal issue, brothers, and sisters, ¾ per cent.(5) (*b*) Descendants of brother or sister . . . . . . 1½ " " (*c*) Uncle or aunt and descendants . . . . . . 3 " " (*d*) Great uncle or aunt and descendants . . . 4 " " (*e*) All other heirs at rates graduated as follows:— Shares, $2,000 to $5,000, 5 per cent " $5,000 " 10,000, 7½ " " " 10,000 " 25,000, 10 " " " 25,000 " 50 000, 12½ " " " 50,000 or more, . 15 " "							(5) Surviving husband or wife not taxed.
Wisconsin .	Five classes of heirs. Rates progressive.(6) Shares are divided into five classes, as follows:— (*a*) $25,000 less exemption; (*b*) $25,000 to $50,000; (*c*) $50,000 to $100,000; (*d*) $100,000 to $500,000; (*e*) $500,000 or more. (*a*) Husband or wife, ancestor, lineal issue, initial rate . 1 %; rate progressive ½% for each class (of shares). (*b*) Sons and daughters in law, brother or sister, and descendants, initial rate . . . . 1½ " " " ¾ " " " " " " (*c*) Uncle or aunt and descendants, initial rate . . . . . . 3 " " " 1½ " " " " " " (*d*) Great uncle or aunt and descendants, initial rate . . . 4 " " " 2 " " " " " " (*e*) All other heirs, initial rate . . . . 5 " " " 2½ " " " " " "							(6) The higher rate is collected upon excess of share over maximum of lower class. Exemptions by classes of heirs are: (*a*) $10,000 (widow) or $2,000 (others); (*b*) $500; (*c*) $250; (*d*) $150; (*e*) $100.

TABLE II. REVENUE DERIVED FROM STATE INHERITANCE TAXES SINCE 1885.(1)

(The Figures denote Thousands of Dollars; thus, 31.2 = $31,200.)

Year.(2)	Maine.	Vermont.	Massachusetts.(3)	Connecticut.	New York.	New Jersey.	Pennsylvania.	Delaware.	Maryland.	West Virginia.	Virginia.	North Carolina.
1904	—	37.2	—	—	—	—	—	—	—	—	—	—
1903	31.2	29.4	506.1	249.7	4,665.7	138.9	1,300.8	*	67.7	1.4	19.6	*
1902	39.9	55.1	427.7	335.7	3,303.6	149.6	1,231.7	1.0	89.5	6.3	*	4.2
1901	38.9	50.8	506.1	222.3	4,084.6	163.7	1,232.1	1.3	90.7	2.6	28.3	.2
1900	18.0	26.3	398.0	165.9	4,334.8	177.0	1,167.7	2.2	54.5	3.8	21.9	*
1899	36.3	13.7	478.7	115.2	2,194.6	85.5	933.6	1.4	58.5	15.5	67.2	*
1898	23.3	11.5	563.7	133.0	1,997.2	112.9	834.9	.3	134.3	2.5	14.3	1.1
1897	28.7	.5	501.4	77.5	1,829.9	113.8	894.7	*	60.3	1.8	1.7	.1
1896	23.2	—	275.4	135.8	1,796.6	82.2	925.7	.8	76.9	1.4	2.8	
1895	42.3	—	419.4	68.8	2,126.8	121.3	1,092.0	1.6	83.2	1.0		
1894	12.1	—	239.4	74.2	1,689.0	204.7	869.2	*	62.7	6.6		
1893	1.0	—	59.4	143.6	3,071.7	44.2	1,124.5	*	70.7	4.7		
1892	—	—	13.9	177.7	1,786.2	21.0	1,110.6	1.2	114.0	1.0		
1891	—	—	—	74.8	890.3	—	1,230.7	.9	67.7	.3		
1890	—	—	—	14.6	1,117.6	—	670.1	—	83.7	.2		
1889	—	—	—	—	1,075.7	—	1,377.5	—	56.4	.1		
1888	—	—	—	—	736.1	—	713.2	—	57.8			
1887	—	—	—	—	561.7	—	762.7	—	45.6			
1886	—	—	—	—	84.1	—	662.1	—	52.2			
1885	—	—	—	—	—	—	797.0	—	147.0			

Year (2)	Ohio.(4)	Illinois.	Michigan.	Wisconsin.	Iowa.	Missouri.	Nebraska.	Tennessee.	Montana.(6)	Colorado.	Utah.	Washington.	California.
1904	—	—	—	—	—	—	—	—	—	—	—	—	286.7
1903	39.3	519.3	164.7	*	234.7(5)	142.6	3.3	*	—	5.0(5)	44.1	35.8(5)	290.4
1902	13.1	1,007.6(5)	211.8	*	—	229.8	.065	74.4	72.7(5)	—	1.6	—	287.0
1901	13.5	—	10.4	32.1	196.5(5)	213.3	—	37.3	—	—	—	3.1	243.6
1900	22.9	958.8(5)	4.6	4.2	—	3.9	—	61.0	13.7(5)	—	—	—	386.9
1899	17.5	—	—	—	52.8(5)	—	—	*	—	—	—	—	157.7
1898	24.2	39.2(5)	—	—	—	—	—	*	7.0	—	—	—	83.6
1897	24.9	—	—	—	—	—	—	*	—	—	—	—	60.7
1896	1.5	.3	—	—	—	—	—	*	—	—	—	—	102.7
1895	—	—	—	—	—	—	—	*	—	—	—	—	32.9
1894	—	—	—	—	—	—	—	*	—	—	—	—	1.4

* Not ascertained. Not reported separately in Tennessee till 1900.

(1) North Dakota, Oregon, Wyoming, Arkansas, and Louisiana are not included, the laws going into effect but recently in the first three, and reports being unavailable for the latter two.

(2) Fiscal year ending as indicated, usually June 30 or December 31.

(3) Does not include interest payments.

(4) State revenue only. Counties retain 25 per cent. of revenue collected.

(5) Includes yield of tax for preceding year.

(6) State revenue only. Counties retain 40 per cent. of the revenue collected.

TABLE III.—REVENUE FROM THE INHERITANCE TAX.

STATE.	For period	Per capita revenue.	Percentage of total revenue.
New York	1899–1901 (3)	$0.4873	12.01
Pennsylvania	1902–1903 (2)	.20	5.75
Connecticut	1899–1901 (3)	.1847	5.73
California	1899–1901 (3)	.1766	2.88
Massachusetts	1899–1901 (3)	.1656	4.96
Montana	1900–1902 (2)	1493[1]	4.68
Vermont	1900–1902 (3)	.1282	
Illinois	1898–1902 (4)	102	7.45
Michigan	1902–1903 (2)	.0778	2.42
New Jersey	1899–1901 (3)	.0754	4.0
Missouri	1902–1903 (2)	.0590	3.46
Maryland	1899–1901 (3)	.0572	1.91
Iowa	1900–1903 (4)	.0483	3.82
Maine	1899–1901 (3)	.0447	
Ohio	1899–1901 (3)	.0433[2]	2.28
Tennessee	1900–1902 (3)	.0285	
Virginia	1903 (1)	.0106	0.53
W. Virginia	1899–1901 (3)	.0076	

Figures in parentheses indicate the number of years considered.
[1] 60 per cent. of the yield, the counties retaining 40 per cent.
[2] 75 per cent. of the yield, the counties retaining 25 per cent.

TABLE IV.—REVENUE FROM THE INHERITANCE TAX IN FOREIGN COUNTRIES.

COUNTRY.	For period	Per capita revenue.	Percentage of total revenue.
United Kingdom	1900–1903 (3)	$2.06	9.97[1]
France	1900–1901 (2)	1.091	6.03
South Australia	1900–1903 (3)	1.024	3.93
Victoria	1900–1903 (3)	.72	3.6
West Australia	1900–1902 (2)	.223	
Tasmania	1900–1903 (3)	.216	1.76
British Columbia	1901–1903 (3)	.182	1.79
Ontario	1901–1903 (3)	.151	6.96
Quebec	1901–1903 (3)	.109	3.92
Nova Scotia	1901–1903 (3)	.10	3.92
New Brunswick	1901–1903 (3)	.052	1.95

[1] Percentage of total national revenue derived from the various "duties."

NOTES AND MEMORANDA.

PROFESSOR TUTTLE'S CAPITAL CONCEPT.

The rejoinder of Professor Tuttle in the November number of this journal[1] calls for a few words in reply. The situation, in brief, is this: The definition of capital which the present writer has advocated is, any *stock* of wealth existing at an *instant* of time, as distinct from a *flow* of wealth consumed or produced during a *period* of time. To this, Professor Tuttle and others objected that, while such a definition may be of service in economic analysis, it does not conform to previous usage. In the issue of this journal of May last[2] the writer replied to these criticisms,[3] and attempted to show (1) that the weight of precedent in the popular and business world, as shown by the work of lexicographers, has always been consistent with and in many cases identical with this definition; and (2) that among economists, on the other hand, there has not been sufficient agreement on any single conception to constitute precedents of importance. Professor Tuttle's conception of capital, "surplus wealth as a possession," was criticised, and the question was raised, What definite meaning was intended to be attached to the term "surplus"? The only indications Professor Tuttle had given were that by "surplus" wealth he meant what was left of the existing stock after deducting "what is required for the satisfaction of current wants."[4] The present writer

[1] "The Fundamental Notion of Capital Once More," *Quarterly Journal of Economics*, vol. xix. pp. 81–110.

[2] "Precedents for Defining Capital," *Ibid.*, vol. xviii. pp. 386–408.

[3] It is a satisfaction to note that the reply to Professor Fetter was accepted by him as harmonising the views on capital held by him and by the present writer (see Fetter, *Principles of Economics*, p. 575). Another accession to the growing list of economists who give a general assent to the proposed capital-concept is Professor H. J. Davenport (see *Journal of Political Economy*, December, 1904, pp. 35, 46).

[4] *Quarterly Journal of Economics*, November, 1903, p. 78; see also pp. 60, 79.

pointed out that the satisfaction of "current" wants requires time, and that "current consumption" at the present moment must always be zero. Professor Tuttle now replies that by the "present" he does not mean the present instant, but a present period. If Professor Tuttle wishes to use the term "present" in such a sense, no objection is offered. No one will dispute that "present" is often used, and may properly be used, in the sense of the "present day," the "present year," or even the "present century."

But, if by the "present" is meant a period of time, this period itself needs to be carefully defined, both as to its length and its relation to the present instant. Professor Tuttle does not do this. His most explicit declaration reads, "That *unit of time* that serves as the basis of organization in the individual's economic life is what the writer conceives to be *the economic present*."[1] The vagueness of this explanation is not lessened when the author goes on to explain that this "present" "is not an absolute period, and, accordingly, its duration cannot be given as so many hours, or days, or weeks, or months. On the contrary, the period is wholly relative, and must be determined by each individual for himself."[2] On this basis the present writer has tried in vain to compute what his own "economic present" may be. How any one can do so does not appear clear. Nor do the directions which Professor Tuttle gives make it clearer:—

"Its duration depends largely on the individual's economic condition,—his mode of economic activity and the length of the production period, the conditions under which the work is done and the terms of payment, the scope of his mental grasp and the character of the industrial system to which he belongs. To Walker's primitive fishermen, accustomed to catch each day the fish for each day's need, the economic present was, perhaps, the day. Under a highly organized industrial system the results of production become available as income to the individual participants in the productive process only at intervals of varying length.

[1] *Quarterly Journal of Economics*, vol. xix. p. 85. [2] *Ibid.*, p. 87.

Though the stream of production is constant, the flow of income is intermittent. Many regard the interval between successive instalments of income as the economic present, whether it be the day, the week, the month, the quarter, or a period of any other length."

Thus, so far from explaining what the "unit of time that serves as the basis of organization in the individual's economic life" may mean, Professor Tuttle leaves its interpretation to each individual. It may be a day, three months, a year, or any other length of time, and depends in an unspecified manner on a number of undefined factors, such as "economic condition," "mode of economic activity," and "scope of his mental grasp."

Not only does Professor Tuttle leave indeterminate the duration of his "present," but, what is of far more consequence, he gives no consistent intimation of its relation to the present instant. He quotes Professor James's striking simile of the psychologist's present,—"The unit of composition of our perception of time is a duration, with a bow and a stern, as it were,—a rearward- and a forward-looking end." Professor James thus considers the "practically cognized present," or *present period*, as a boat floating down the stream of time, with the *present instant* perched as a passenger somewhere between the bow and the stern. But Professor Tuttle sometimes places his passenger at the bow and sometimes at the stern, while at other times he seems to anchor his boat and compel Present Instant to move from stern to bow, and then enter another stationary boat, and so on in endless succession. All of these conflicting ideas find a place in Professor Tuttle's article. Present Instant is evidently seated in the stern when we are told that, to find capital, we must subtract from a stock of wealth "that quantum which *is destined to be* consumed in the economic present,"[1] and also where he states, ". . . it at once becomes necessary to divide this fund of wealth into two parts, the one *to be devoted* to consumption pur-

[1] *Quarterly Journal of Economics*, vol. xix. p. 89. The italics are the present writer's, as in all other quotations except that from p. 85.

poses in the economic present, and the other, surplus wealth or capital,"[1] as well as elsewhere. On the other hand, Present Instant is evidently seated in the bow, with the whole of his "present period" behind him, in the following passage, among others:—

. . . "only that is surplus which remains *at the close* of that period, after the income of the period—present or current income—has all been received, and the expenditures of the period—present or current expenditures—have all been made. And this is capital. Whoever possesses a surplus has capital. Capital grows by the accumulation of surpluses."[2]

To this we can give unqualified assent. Professor Tuttle does not seem to be aware that, if Present Instant is taken at the *close* of Present Period, the "surplus" left, added to like surpluses of previous periods, constitutes the *whole* of the existing stock, and that his conception of capital then coincides with the present writer's. None of the consumption of the past is any deduction from the stock of wealth existing at the present instant. That stock is simply savings, or the combined "surplus" left over from the past for the future. In other words, if Present Instant be accorded a fixed position in the *bow* of his moving craft called Present Period, Professor Tuttle's "capital" turns out to be the "capital" of the present writer. Whether there is any *casus belli* between us depends entirely on where Professor Tuttle decides to locate Present Instant relatively to Present Period. Peace is still possible, provided he will consistently treat his "present," not as partly future, but as all *past*.

Finally, Professor Tuttle sometimes anchors his boat, and regards his present period, not as progressing with the present instant, but as fixed in the calendar year.[3] He instances the quarterly interval between dividend payments as being, sometimes at least, the "economic present." Such intervals are totally unlike Professor James's "cognized present," for they do not glide down the stream of

[1] *Quarterly Journal of Economics*, vol. xix. p. 106. [2] *Ibid.*, p. 89. [3] *Ibid.*, p. 87.

time, but are fixed in it. In this case Present Instant is, to change the simile, like a locomotive traversing successively a series of railway "blocks," each of which becomes the Present Period as soon as Present Instant enters it, and ceases so to be as soon as said Instant departs. If this be Professor Tuttle's meaning, it at least enables us to state that his "capital" coincides with the total stock at periodical intervals; namely, just as Present Instant is leaving Present Period. If each economic "block" is a calendar year, one's capital on December 31, 1904, is, correctly enough, his total stock. But, apparently, according to Professor Tuttle, on the next day, January 1, 1905, it is no longer the total stock, but that stock less the expected consumption of 1905. As the New Year's bells chime, his "capital" suddenly shrinks!

Aside from the question of the utility of such an oscillating "capital," we query how it is to be interpreted definitely where income accrues irregularly instead of regularly, where its instalments are of uncertain instead of certain amounts, and, lastly, how it is to be applied to the income of society as a whole. The "economic present" being, confessedly, a different period for different individuals, what is the "economic present" of society? And, if there be such a period, does it move forward in time with the Present Instant, or is it fixed and stationary,—*i.e.*, is it an anchored or a movable boat? Finally, is the passenger, Present Instant, to be accorded any fixed resting-place therein?

In view of such uncertainties it would seem that Professor Tuttle's argumentation, so far from raising objections to that conception of capital which is based on time relations, only supplies new evidence of the serious need, in economics, of recognizing and specifying clearly the fundamental relations between instants and periods of time.

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THE TERMINOLOGY OF THE THEORY OF POPULATION.

In his recently published *Distribution of Wealth*, Professor Carver says, in the course of summing up the subject of standard of living (pp. 176–177):—

"Thus it will appear that a high standard of living when referred to the question of population may mean one of two things. It may mean that the general scope of the people's wants has been widened and deepened or the domestic affections have been weakened, or both."

Then in a foot-note we read:—

"For want of a better term we are compelled to use the term 'domestic affections' in a somewhat general sense, including the sum total of those motives which impel toward marriage and the begetting of offspring. If we distinguish between the animal passions and the higher domestic affections, we shall find that the latter quite often check rather than increase population by making parents more considerate of the future of their children, and unwilling to risk their best interests by having too many to provide for."

The present writer regrets that Professor Carver did not embrace the opportunity, in this excellent handling of a difficult subject, to make use of the new and superior piece of terminology supplied by John Rae,—"the effective desire of offspring." (See Rae's Letters to Mill, *Economic Journal*, March, 1902.) Adapting Carver's thought and expression to that of Rae, the whole matter may be restated thus.

In respect to the normal individual at any time there is first a certain state of the "domestic affections," which is "the sum total of those motives which impel toward marriage and the begetting [and rearing] of offspring." And secondly, over against this, there is a certain state of the "general scope of [economic] wants." The imme-

diate outcome of the two opposed sets of motives is "the effective desire of offspring" of the individual. According as one or the other prevails, his "effective desire of offspring" will be weak or strong.

From any given degree of strength of the effective desire of offspring in any individual will emerge a certain line of action touching things economic and domestic, which we may call the maintenance of a standard of living. The maintenance or possession of a high standard of living corresponds to a low effective desire of offspring, and *vice versa*.

If the general scope of economic wants is widened and deepened (and hence, other things being equal, the standard of living is raised), it may be either because of increased influence of economic interests respecting the individual's own self, or respecting his offspring. The effective desire of offspring may be low and the standard of living high, either in a very selfish, vain, and luxurious person or in one the opposite of this who feels keenly his responsibility for the future of his children or child. Reasonable consideration of the truly "best interests" of children is, with persons of this class, often replaced by over-ambition for them.

In respect to society and the ups and downs of population during considerable periods of time we have to go deeper still in our analysis, and to place what Rae calls the "instincts of society" touching matters of marriage and procreation beneath the principle of "domestic affections" of the individual.

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LATER HISTORY OF THE STEEL CORPORATION'S BOND CONVERSION.[1]

The underlying motives for the extraordinary fiscal operation known as the United States Steel Bond Conversion of 1903 have been variously interpreted. It has been freely ascribed by some to the desire of important owners of the preferred stock to dispose of their unwieldy holdings to the public in the form of bonds. Others allege that participation in industrial investments by large life insurance companies would be less indefensible in the purchase of bonds than of preferred stock. Even among the large body of private investors there are many who will purchase bonds, but will buy stocks only of the highest grade. The bond having a right of foreclosure cannot decline in value below a point determined by its equity interest in the property. Stocks are not thus limited as to their possible decline in value, but may fall to any degree. A double motive, in the judgment of authorities, existed. The bonds would naturally have a better market than the stock. The stock, also, if on a dividend basis, would command a better price if the supply of it on the market were thus reduced. This consideration, in days of "undigested securities," was an important one.

That imperative need of cash for improvements was not the sole or even dominant motive, as alleged by the company, would seem to follow from a number of considerations. In the first place, cessation of dividends on common stock, without resort to conversion at all, would speedily have supplied the necessary funds from current earnings, as is the conservative policy of railway companies. This expedient was certainly possible under the conditions which prevailed when the plan was resumed in March, 1903. A year of litigation had resulted in a dis-

[1] An account of the nature and earlier history of this operation is given in the *Quarterly Journal of Economics*, vol. xviii. pp. 22–53, 303–304, 1903.

solution of the injunction granted by a lower court. Enormous earnings of the company, meanwhile, had resulted in December, 1902, in "undivided earnings" of $33,841,565 upon the year's business. Under such circumstances the imperative need for cash, urged on behalf of the original plan, certainly did not exist. A second cogent criticism against this alleged motive is that the plan as approved, and afterwards as actually carried out, would result in cash receipts insignificant compared with the magnitude of the other operations involved. At the most, the only source of ready cash from the plan would be the sale of $20,000,000 of bonds at par, from which the commission of 4 per cent. for the syndicate would be deducted. Yet the official statement given out on November 19, 1903, by the executive committee of the board of directors showed that only $2,902,000 of such bonds had been actually sold at par for cash, paid for in full October 1, and already issued. On the remainder of the minimum $20,000,000 of bonds guaranteed by the syndicate at par for cash, on October 21 only 25 per cent. had been called for and paid to the corporation. Had the real reason for this entire operation lain, as alleged, in the imperative need for cash, why was not the syndicate called upon promptly for the balance of its guarantee?

From the foregoing considerations it seems clear that an important motive for the transaction was to secure a large profit to prominent bankers who were represented at the same time on the board of directors of the Steel Corporation. This interpretation seems to follow from the original plan as proposed. It derives added force from the subsequent history of the enterprise. Stockholders were permitted until May 16, 1903, to take advantage of the conversion scheme. At that time the bonds were selling above $90, and the preferred stock was a few points lower. The exchange would therefore leave a profit probably less than 5 per cent. The syndicate, however, had not only *guaranteed* a conversion of $80,000,000 of this preferred stock, but its contract provided that it might, if so dis-

posed, convert the balance of the $200,000,000 of preferred stock authorized for exchange into bonds. The life of the syndicate was to terminate October 1, 1903. Meanwhile the margin between the market price of the new bonds and the preferred stock had perceptibly widened. In other words, depression in the steel industry was becoming evident. Suddenly the financial community was startled by a circular notice announcing that the life of the syndicate had been extended from October 1, 1903, until the following July.[1] Obviously, this cleared the way for a continued conversion of the preferred stock into bonds at a profit continually growing with the widening margin between the two classes of securities. This profit was not open to the general stockholders, whose option had expired in the preceding May. November brought still further trade contraction, until the preferred stock was quoted at about $50, while the new 5 per cent. bonds were selling some fifteen points higher. This meant a profit of about $150 per bond, exclusively reserved to the banking syndicate. Moreover, a cumulative process was evidently involved, inasmuch as the greater the amount of conversion, placing bonds ahead of stock, the less was the preferred stock on the market worth. This scandalous condition of affairs finally induced the company to terminate the contract and limit the amount of conversion to $150,000,000 in place of $200,000,000, as originally planned.[2]

The net results of the transaction would seem to be as follows. Of the $50,000,000 bonds originally to be sold for cash, none were taken by the public. The price never rose above $95, while they were offered at par. The syndicate assumed its guarantee of $20,000,000 at par, but only a small fraction of this offer of cash had been taken by the company when the contract was cancelled. As to the $200,000,000 of preferred stock to be converted (afterward reduced to $150,000,000), outside shareholders whose rights

[1] Official notices and other documents will be found in Moody, *Truth about the Trusts*, p. 185.

[2] A searching analysis of this phase of the matter is given by Mr. A. D. Noyes in the *Forum*, January, 1904, p. 368 *et seq.*

expired in May availed themselves of the privilege to an amount variously estimated at from \$35,000,000 to \$50,-000,000. The syndicate, compelled by its guarantee to convert \$80,000,000, must therefore have taken care of the balance of \$150,000,000. This last was the limit finally set by the company on terminating the contract upon completion in November, 1903. The results to the United States Steel Corporation of the entire transaction were then twofold. First, an amount of cash insignificant at best was provided, not all of this being taken as offered. Second, an evident saving in the annual charges was made, determined by the difference between the dividends on the old preferred stock at 7 per cent. and the interest at 5 per cent. on the new bonds. But as an offset to this, as previously shown, was the fact that the new bonds were a fixed charge with foreclosure rights, while the dividend payments were contingent upon earnings. There remains then for discussion only the amount of profit which must have accrued to the syndicate, many of whom were directors in the company; a profit which, had no options been given to the syndicate, could have been made by the Corporation itself. As a loss must be reckoned the sale of the bonds at figures ranging from \$95 down to \$75, such bonds having been taken at par. On the other hand, profits arose from two sources. The cash commission at 4 per cent. on \$170,000,000 of the new bonds was considerable and certain. In addition to this came the exclusive privilege after May, 1903, of converting the stock into bonds at a margin of difference vastly greater than could have been contemplated when the contract was drawn. Whatever the judgment of the courts may have been on the legality of the transaction, there can be no doubt that from a fiscal point of view the entire operation betrayed a disregard of the principles of sound finance, and even of common honesty and fair dealing with the stockholders.

WILLIAM Z. RIPLEY.

THE END OF THE MARYLAND WORKMEN'S COMPENSATION ACT.

In the *Quarterly Journal of Economics* for August, 1902, an account was given of the Maryland Workmen's Compensation Act, which went into effect July 1, 1902.[1] This law made employers in certain specified industries responsible in damages for the injury or death of an employee caused by the negligence of a fellow-employee. Provision was made, however, that employers who paid to the State Insurance Commissioner annually a prescribed sum for each workman in their employment should be relieved of all liability for the injury or death of any of their workmen. From the payments thus made the insurance commissioner was required to pay the sum of one thousand dollars to the representatives of each deceased employee so insured whose death was due to causes arising in the course of his employment.

The act remained in force from July 1, 1902, to April 28, 1904. During this period seven quarry companies and two street railway companies made the prescribed payments. The total sum collected was $5,313.70. Five death claims of $1,000 each were paid, and all claims against the fund were settled.

The constitutionality of the law came before the courts in the case of *Andrew J. Franklin* v. *The United Railways and Electric Company of Baltimore.* The suit was for injuries sustained by the plaintiff through the burning out of a fuse and the electrical appliances on one of the company's cars. The case was tried in the Court of Common Pleas of Baltimore City. The railway company set up the defence that it was exempt from the plaintiff's claim, since it had paid to the State Insurance Commissioner an annual sum of sixty cents for each employee, as required by the act of the General Assembly. To this the plaintiff offered

[1] The law is contained in *Maryland Acts of Assembly*, 1902, chap. 139.

a demurrer that the law in question was unconstitutional. The court sustained the plaintiff's contention. The essential part of the opinion rendered was as follows:[1]—

The act provided for the payment of the death benefit in two classes of cases in which there was previously no right of action; namely, where the death resulted from the negligence of a fellow-servant and where the deceased had by his own negligence directly contributed to his death. But for the handling and disbursement of this entire fund "plenary power" was lodged in the hands of the insurance commissioner, thus investing him with judicial or quasi-judicial powers, and that without any provision for a trial by a jury or any right of appeal from his conclusions.

Had the act stopped here, it might well be argued that, inasmuch as it provided for a fund for the benefit of certain widows and orphans who would otherwise be remediless, it was within the power of the legislature to place the administration of that fund in the hands of such officials as it might see fit; but the act did not stop with the provisions already referred to, but also embraced cases where the death had been caused by the negligence of the employer, cases where there would have been clear right of action in the courts under existing law. It also enacted that employers who made the payments provided in the act should by such payments be exempted from further liability.

The effect of the act was, therefore, not only to vest in the insurance commissioner powers and functions essentially judicial in character, but to take away from citizens a legal right which they had theretofore enjoyed, and which could be enforced by them in the courts, and also to deny them a right to have their cases heard before a jury. It is only necessary to clearly understand the provisions of this act to see that they are in direct conflict with several of the provisions of the constitution of the State.

Thus Article 5 of the Declaration of Rights assures to the people the right of trial by jury (*Knee* v. *City Passenger Railway Company*, 87 Md. 624). Article 19 gives to every one for injury done to him in his person or property a remedy by the course of the law of the land. Yet both of these guarantees are completely ignored by the act in question. Without prolonging the matter, therefore, it is clearly evident that the act in question is framed in total disregard of the provisions of the constitution; that the act must be declared void, and the demurrer sustained.

The counsel for the railway company did not carry the case to the Court of Appeals; and the State Insurance Com-

[1] The decision, being that of a lower court, is not printed in the Maryland Reports, but is recorded in the Court of Common Pleas of Baltimore.

missioner, acquiescing in the decision of the lower court, notified the contributing employers that he could not receive further payments. In a letter dated May 10 he informed the Governor of Maryland that he had closed the accounts of the fund, and expressed the following view of the working of the law: "I believe the law was a good one both for the company and the employees. This law was in operation nearly two years. The entire expense was only $300, about 6 per cent. of the amount paid in. It can readily be seen what an advantage it had over ordinary insurance companies, when the expenses are scarcely ever below 50 per cent. of the premium receipts."

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Johns Hopkins University.

WE have received the announcement of a new periodical, *Kritische Blätter für die gesammten Sozialwissenschaften: Bibliographisch-kritisches Zentral-Organ*, which promises to add to the existing list of publications, long as it is, something of real value for scholars and students. The sub-title indicates the design. Each number is to contain, first, a bibliography, which is to note not only all books, but articles in periodicals and in important newspapers, and significant addresses at Congresses or Parliaments; and, second, reviews, partly descriptive and partly critical. The editors (Drs. Hermann Beck of Berlin, Hanns Dorn of Munich, and Othmar Spann of Berlin) undertake to cover the ground exhaustively and punctually, and promise that no school or doctrine shall be either privileged or excluded. A wide range of subjects to be covered,—economics and economic history, sociology and social policy, taxation and finance, statistics, population, and, where pertinent, philosophy, jurisprudence, geography, commerce, anthropology, and the like. So far as book reviews are concerned, the *Kritische Blätter* will not pretend to supplant existing periodicals in their critical discussion of contemporary literature: its primary object will be to give prompt information as to the nature and worth of all new publications. A list is given of several hundred writers who have promised cooperation. The undertaking is no small one: its successful prosecution is much to be desired.

The *Kritische Blätter* are to be issued on the 15th of each month, and are expected then to give a bibliography of publications of the preceding month. The first number is announced to appear on February 15, 1905. The subscription price is 24 marks per year, to be remitted to the publisher, O. V. Böhmert, Leipsic.

RECENT PUBLICATIONS UPON ECONOMICS.

Chiefly published or announced since November, 1904.

An asterisk prefixed to a title indicates a second and more detailed notice of a book announced in a previous number.

I. GENERAL WORKS. THEORY AND ITS HISTORY.

ANTOINE (Ch.). Cours d'économie politique. 3me édition, revue et augmentée. Paris: Guillaumin. 1905. 8vo. pp. 773. 9 fr.

CABIBBE (C.). La teoria del salario negli economisti della seconda meta del secolo XVIII. Siena. 1904.

CARLILE (W. W.). Economic Method and Economic Fallacies. London: Edward Arnold. 1904. 8vo. pp. 284.

[A series of acute and discriminating essays. Part I. The Logic of Political Economy. Part II. Types of Economic Fallacy. Part III. The Protectionist Fallacy.]

COLSON (C.). Cours d'économie politique. Tome II. La propriété des biens corporels et incorporels. Le commerce et la circulation. Paris: Gauthiers-Villars. 1904. 8vo. pp. 774. 10 fr.

CUNNYNGHAME (C.). A Geometrical Political Economy. Oxford: Clarendon Press. 1904. 8vo. pp. 128. 2s. 6d.

["An elementary treatise on the method of explaining some of the theories of pure economic science by means of diagrams."]

DAMASHKE (A.). Geschichte der Nationaloekonomie. Eine erste Einführung. Jena: G. Fischer. 8vo. pp. 239. 2.50 m.

*DUNBAR (C. F.). Economic Essays. Edited by O. M. W. Sprague, with Introduction by F. W. Taussig. New York: Macmillan. 1904. 8vo. pp. xvii, 372.

[The first fifteen essays are reprinted, chiefly from the Quarterly Journal of Economics; essays XVI. and XVII. deal with the crises of 1857 and 1860, and have never appeared before; essays XVIII., XIX., and XX., also new, deal with the history of banking in the United States.]

ELEUTHEROPULUS (A.). Soziologie. Jena: G. Fischer. 8vo. 3.25 m.

[The author is dozent at Zürich. One of the prize essays on the relation of Darwinism and selection to social problems, resulting from a competition under the charge of Professor Conrad and others. All these essays are published in a general collection, sold at reduced rates to subscribers.]

GRIFFIN (A. P. C., editor). List of Books on Immigration. Washing-

ton: Library of Congress. 1904. 8vo. pp. viii, 76.

——. List of Books on Banks and Banking. Washington: Library of Congress. 1904. 8vo. pp. 55.

——. List of References on the British Tariff Movement. Washington: Library of Congress, 1904. 8vo. pp. 37.

——. List of Books relating to Railroads. Washington: Library of Congress. 1904. 8vo. pp. vi, 72.

——. Select List of References on the Budgets of Foreign Countries. Washington: Library of Congress. 1904. 8vo. pp. 19.

HIRST (F. W.). Adam Smith (English Men of Letters). New York: Macmillan. 1904. 12mo. pp. 204. 75 cts.

[In the "English Men of Letters" series. The best short account of the life of Smith. Criticises entertainingly the "misdirected erudition" of some of Smith's critics and commentators.]

KEYNES (J. N.). The Scope and Method of Political Economy. London: Macmillan. 1904. 8vo. pp. 382. 7s.

[Third edition, revised.]

LINDEMANN (Dr. M.). Urbegriffe der Wirtschaftswissenschaft. Arbeit, Wert, Geld, Preis, Wirtschaft. Dresden: O. Böhmert. 8vo. pp. 259. 6 m.

LIST (Fr.). Das nationale System der politischen Oekonomie. Neudruck nach letzter Ausgabe, mit Einleitung von H. Waentig. Jena: G. Fischer. 8vo. pp. 562. 6 m.

[In the Sammlung sozialwiss. Meister, edited by Professor Waentig, who supplies the Introduction to this reprint of List.]

——. The National System of Political Economy. London: Longmans. 1904. 8vo. pp. 366. 6s.

[Lloyd's translation, with a new Introduction by Professor Nicholson.]

MARTINAZZOLI (A. L.). La teorica dell' individualismo secondo John Stuart Mill. Milan: Ulrico Hoepli, 1905. 16mo. pp. viii, 352. 4.50 l.

MICHAELIS (C.). Principien der natürlichen und sozialen Entwickelungsgeschichte des Menschen. Anthropologisch-ethnologische Studien. Jena: G. Fischer. 8vo. 3.25 m.

[Another of the prize essays mentioned above.]

RAVÀ (A.). La classificazione delle scienze e le discipline sociali. Rome: Ermanno Loescher e C. 1904. 8vo. pp. ix, 172. 2.50 l.

SCHWEIZER (Frz.). Physiokratismus und Turgot. Ravensburg: F. Alber. 8vo. pp. 154. 2.80 m.

[The second instalment in this writer's Geschichte der nat. Oekonomik in 4 Monographien über Colbert, Turgot, Smith, und Marx.]

THORNDIKE (E. L.). An Introduction to the Theory of Mental and Social Measurements. New York: The Science Press. 1904. 8vo. pp. 212.

[A highly technical treatise, intended for students of economics, sociology, and education rather than psychology pure and simple; an able investigation, of permanent value.]

VILLEY (E.). Principes d'économie politique. 3me édition. Paris: Guillaumin. 1905. 8vo. pp. 747. 10 fr.

WHITAKER (A. C.). History and Criticism of the Labor Theory of Value. New York: Macmillan Co. 8vo. pp. 1904. $1.50.

[In Columbia University Studies. An able critical account of the writers from Adam Smith to Cairnes. A concluding chapter, on the ultimate relation of cost to value, states the author's own opinions, which follow the reasoning of J. B. Clark.]

ZWIEDENECK-SÜDENHORST (O.). Beiträge zur Lehre von den Lohnformen. Mit 2 Kurven. Tübingen: H. Laupp. 8vo. pp. 134. 3.60.

[Published also as supplement to the Zeitschrift f. d. ges. Staatswissenschaft, at a reduced price for subscribers.]

In Periodicals.

BIERMANN (W. E.). Sozialwissenschaft, Geschichte, und Naturwissenschaft. Jahrb. f. Nat. Oek., Nov., 1904.

BONINSEGNI (P.). Tentativi di ricerca sulle funzioni di domanda

e di offerta nel caso del baratto supposte le ofelimità elementari lineari. Giorn. degli Econ., Sept., 1904.

DAVENPORT (H. J.). Capital as a Competitive Concept. Journ. Polit. Econ., Dec., 1904. [Argues that for competitive purposes there is no real distinction between land and capital.]

JORDAN (D. S.). Utilitarian Science. Pop. Sci. Monthly, Nov., 1904. [Discusses economics, along with engineering and medicine, for the purpose of defining the problems and methods of the immediate future.]

KAULLA (R.). Die Lehre vom gerechten Preis in der Scholastik. Zeitschr. f. d. ges. Staatsw., 1904, Heft 4.

LIFSCHITZ (F.). Die sozialen Ansichten Johann Heinrichs von Thünen. Jahrb. f. Nat. Oek., Oct., 1904.

———. J. B. Says Methodologie der Wirtschaftswissenschaft. Jahrb. f. Nat. Oek., Nov., 1904.

SELLA (E.). La speculazione e gli antichi trattatisti. Giorn. degli Econ., Oct., 1904. [An examination of the logical error of the canonist position concerning speculation.]

———. Della natura logica dei problemi terminali dell' economia politica. Giorn. degli Econ., Nov., 1904. [An interesting article, emphasizing the need and place of more precise definition in economic reasoning.]

II. THE LABOR PROBLEM.

BORGHT (R. v. d.). Grundzüge der Sozialpolitik. Leipzig: C. L. Hirschfeld. 8vo. pp. 578. 16.50 m.
[Another volume in the Hand- und Lehrbuch der Staatswissenschaften, now edited by M. v. Heckel.]

BOUGLÉ (C.). Solidarisme et libéralisme. Paris: Cornely. 1904. 16mo. pp. 256. 1.50 fr.

CONRAD (Carl). Die Organisation des Arbeitsnachweises in Deutschland. Leipzig: Duncker & Humblot. 8vo. pp. 484. 9 m.
[The author is a clergyman.]

DARROW (C. S.). The Open Shop. Chicago: Hammersmark Pub. Co. 1904. pp. 32. 10 cts.

DELAHAYE (A.). Les grèves envisagées dans leurs rapports avec les obligations. Paris: Michalon. 1904. 8vo. 4 fr.

DUCHAUFFOUR (A.). Les accidents du travail. Paris: Baillière. 1904. 16mo. pp. 292. 3.30 fr.

FEURSTEIN (Dr. H.). Lohn- und Haushalt der Uhrenfabrikarbeiter des bayrischen Schwarzwalds. Karlsruhe: G. Braun. 8vo. pp. 216. 3 m.
[In Volksw. Abhandl., edited by C. J. Fuchs, Rathgen, Gaevernitz.]

FUCHS (C. J.). Zur Wohnungsfrage. Vorträge und Aufsätze. Leipzig: Duncker & Humblot. 8vo. pp. 227. 4.60 m.
[Part I. Geschichte und Theorie,—chiefly on Germany. Part II. Kommunale Wohnungsreform in England und Schottland,—studies on Glasgow, Manchester, Birmingham, Liverpool, London. Abundant illustrations and plans. The author is professor of economics at Freiburg.]

IMBERT (P.). Les retraites des travailleurs. Préface de Paul Deschanel. Paris: Perrin. 1904. 16mo. 3.50 fr.

KELLOR (Frances A.). Out of Work. New York: Putnam's. 12mo. pp. 292.
[An important study, by nine investigators, of employment agencies in the United States. An exceptionally able and useful work.]

MITCHELL (John). Organisierte Arbeit. Deutsch von Dr. H. Hasse. Dresden: O. Böhmert. 8vo. pp. 231. 4 m.
[The translation into German of this book deserves to be noted.]

STILTING (A. J.). Grèves des chemins de fer et législation aux Pays Bas en 1903. Paris: Giard et Brière. 1904. 8vo. 3.50 fr.

TOSI (V.). La cooperazione e la sua funzione nell' ordinamento

sociale. Venice. 1904. 8vo. pp. 171. 3 l.

VITALI (P.). La question des retraites ouvrières devant le parlement français. Paris: Rousseau. 1904. 8vo. pp. 272. 7.50 fr.

WEBB (C., editor). Industrial Co-operation. Manchester: The Co-operative Union. 8vo. pp. 278. 2s. 6d.

[An authorized text-book, by a number of writers, with a preface by L. L. Price.]

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BLACK (Clementina). London's Tailoresses. Econ. Journ., Dec. [Descriptive notes on the labor conditions for such women in London.]

CAYLEY (H.). The Housing of Cambridge. Econ. Rev., Oct., 1904. [A detailed investigation by the two branches of the Christian Social Union.]

DRAGONI (C.). Sull' istituzione di un ispettorato del lavoro. Giorn. degli Econ., Nov., 1904.

EMMINGHAUS (A.). Zum Kapitel der Haushaltskosten. Jahrb. f. Nat. Oek., Nov., 1904. [The analysis of a middle-class household budget from 1862-1903.]

GEISSER (A.) and MAGRINI (E.). Contribuzione alla storia e statistica dei salari industriali in Italia nella secondo metà del secolo XIX. Riforma Soc., Oct., Nov., 1904. [A valuable collection of statistical material, with documents and bibliography.]

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HANGER (G. W. W.). Building and Loan Associations in the United States. Bull. U.S. Dept. of Labor, Nov.

HARDIE (K.). Dealing with the Unemployed. Nineteenth Cent., Jan.

KALCKSTEIN (W. von). Das Einlogiererwesen in deutschen Städten. Jahrb. f. Nat. Oek., Nov., 1904.

LOUIS (P.). La corporation autrichienne. Mus. Soc., Nov. [The "corporation" in Austria unites masters and workmen in the small industries for mutual assistance.]

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MASTERMAN (O. F. G.). The Problem of the Unemployed. Indep. Rev., Jan.

PINKUS (N.). Workmen's Insurance in Germany. III. Yale Rev., Nov., 1904.

ROSENORST (O.). La coopération au Danemark. Rev. d'Écon. Pol., Oct. [Apparently successful experiments with agricultural and consumer's co-operation.]

SCHLENTHER (C.). Die Arbeiterwohlfahrtseinrichtungen der Firma Gebr. Stumm in Neunkirchen. Jahrb. f. Nat. Oek., Oct., 1904.

SEAGER (H. R.). The Courts on Restrictive Labor Laws. Pol. Sci. Quart., Dec. [Judicial interpretation of constitutional limitations has tended of late to be more liberal, enlarging the scope of the "police power" and leaving it to the legislature to decide on the expediency of restrictive legislation.]

SMART (W.). The Problem of Housing. Econ. Journ., Dec. [Presidential address to the Economic Section of the British Association. The author gives the results of his experience on a Glasgow Commission. While not in general favorable to municipal building, an experiment in building houses for the dispossessed poor is advised.]

VIRGILII (F.). Il primo anno di vita dell' Ufficio del Lavoro italiano. Riforma Soc., Oct.-Nov., 1904.

WHITE (H.). The Issue of the

Open and Closed Shop. No. Amer. Rev., Jan., 1905.

WILBRANDT (R.). Elektrischer Antrieb mit Maximalarbeitstag und Mindestlohntarif in der Hausweberei. Jahrb. f. Nat. Oek., Nov., 1904. [An interesting note on the organization of the silk ribbon weavers in and near Crefeld.]

WOLFF (H. W.). The Co-operative Congress at Budapest. Econ. Rev., Oct., 1904.

UNSIGNED. Exhibit of United States Department of Labor at St. Louis. Bulletin U.S. Dept. Labor, No. 54, Sept. [Contains brief summaries and an excellent series of charts on topics covered by the serial reports of the Bureau.]

III. SOCIALISM.

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[An authorized translation from the 8th German edition. A refutation of socialism from the Catholic point of view. The translation is excellent.]

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GHENT (W. J.). Mass and Class: A Survey of Social Divisions. New York: Macmillan. 1904. 12mo. pp. 260. $1.25.

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[A third, revised edition of this well-known work.]

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HERCKENRATH (C. R. C.). La question sociale et l'héritage. Rev. d'Écon. Pol., Dec. [Advocates the suppression of private inheritance.]

IV. LAND AND AGRARIAN PROBLEMS.

CICCOTTI (E.). Sulla questione meridionale. Milan: Casa edit. Moderna. 1904. 8vo. pp. xvi, 365. 3.50 l.

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GRANGE (H.). A British Farmer in Canada and a Visit to the States. London: Blackie. 1904. 8vo. pp. 150. 3s. 6d.

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[Utilization of electricity in agriculture.]

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V. POPULATION AND MIGRATION.

APUZZO (N.). L' emigrazione nel diritto italiano: studio sistematico di legislazione sociale. Naples: Luigi Pierro. 1904. 8vo. pp. 270. 5 l.

TAKAOKA (Dr. Kumao). Die innere Kolonisation Japans. Leipzig: Duncker & Humblot. 8vo. pp. 116. 2.60 m.

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series of short papers on the Slav in America.]

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WARD (R. De C.). The Agricultural Distribution of Immigrants. Pop. Sci. Monthly, Dec., 1904. [Points out the futility of this method of dealing with the problem.]

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PAINE (A. E.). The Granger Movement in Illinois. Vol. I., No. 8 of University Studies of University of Illinois. Urbana, Ill.: University of Illinois. 8vo. pp. 53. 35 cents.

[A useful and discriminating essay containing much new material. Concludes that "no small share of the political, social, and industrial progress of the farmer in Illinois may be traced to the Grange."]

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[The author is an army engineer.]

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i diretti. Riforma Soc., Dec., 1904. [A discussion of the demand for third-class carriages in all through trains.]

Leon (P.). La navigation intérieure en France. Rev. Écon. Intern., Nov. [Canals necessitated by the exorbitant railway rates.]

Manfrin (P.). Un problema della vita italiana. Riforma Soc., Sept., 1904. [A warm advocacy of the development of internal navigation in Italy.]

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Pratt (E. A.). British Railway Rates. Monthly Rev., Jan.

Renkin (J.). Les chemins de fer de l'état belge. Rev. Écon. Intern., Nov. [With present methods of accounting, one can draw no sure conclusions as to financial results.]

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VII. FOREIGN TRADE AND COLONIZATION.

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Ashley (P.) Modern Tariff Systems,—Germany, United States, France. London: Murray. 1904. 8vo. pp. 367. 10s. 6d.

Ashley (W. J.). The Progress of the German Working Classes in the Last Quarter of a Century. With map, diagrams, and charts. London and New York: Longmans & Co. 1904. 12mo. pp. 177.

[Written with a view to the tariff controversy in England, to show that "protection has not been inconsistent with a great advance" in general prosperity. The subjects of the chapters are: I. The Argument from Comparison; II. The Progress of Germany and the Agricultural Working Classes; III. The Workpeople in Manufactures; IV. Criteria of Growing Prosperity; V. The Depression of 1903 and its Disappearance.]

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[A series of articles by different writers.]

Brassey (Lord). The Comparative Efficiency of English and Foreign Labor. London: Longmans. 1904. 6d.

[An address.]

Cavaglieri (A.). Il fattore economico nella storia del diritto internazionale. Padua-Verona: Fratelli Drucker. 1904. 8vo. pp. 86. 1.50 l.

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[A continuation to date of the work begun by Lord Brassey in 1872 on the relative efficiency of British and foreign labor. A work of real value.]

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[The substance of lectures delivered at the University of Cambridge, sketching fiscal history under Huskisson, Peel, Cobden, and concluding in favor of "introducing economic order into the Empire,"—presumably by the Chamberlain plan.]

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MARTIN (R.). Die Eisenindustrie in ihrem Kampf um den Absatzmarkt. Eine Studie über Schutzzölle und Kartelle. Leipzig: Duncker & Humblot. 8vo. 7 m.

*MEREDITH (H. O.). Protection in France. London: P. S. King & Son. 1904. 12mo. pp. 192. 3s. 6d.

[In the series on "Protection in Various Countries," edited by W. H. Dawson. A good sketch of French tariff history in the 19th century and a discriminating analysis of the effects on agriculture, manufactures, shipping, general economic progress. The author is a cool-headed free-trader.]

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NICHOLSON (J. S.). The History of the English Corn Laws. London: Sonnenschein. 1904. 8vo. pp. 188. 2s. 6d.

[Lectures delivered at Cambridge, England, last year.]

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[A study of the fiscal controversy in its economic, financial, and political aspects. "Protection may offer a temporary remedy, but is likely in the end to produce more harm than good." Imperial federation is "a vain hope."]

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LOTZ (W.). The Effect of Protection on Some German Industries. Econ. Journ., Dec. [The iron and steel industries chiefly considered. The result of protection here is to deprive old countries of the advantage which they need in the cheap production of finished articles.]

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VIII. MONEY, BANKING AND EXCHANGE.

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[In Münchener volksw. Studien, edited by Brentano and Lotz.]

GUNN (N. H.). Stock Exchange Securities and how to select them. Edinburgh: Blackwood. 1904. 8vo. pp. 350. 7*s.* 6*d.*
[The author is president of the Society of Actuaries of Scotland.]

INGALL (G. D.) and WITHERS (G.). The Stock Exchange. New York: Longmans & Green. 1904.

NELSON (S. A.). The A, B, C, of Options and Arbitrage. New York: S. A. Nelson. 12mo. $1.25.

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SYKES (R.). Banking and Currency. Introduction by T. E. Steele. London: Butterworth. 1904. 8vo. pp. 244. 5*s.*
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NOYES (A. D.). Why there has been no Financial Crisis. Yale Rev., Nov., 1904. [Because it was the "ten-year panic" and not the "twenty-year grand crisis."]

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[A doctor's dissertation in Conrad's Sammlung nat.-oek. und statistischer Abhandlungen].

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NEUMANN (F. J.). Die progressive Einkommensteuer im Staats. u. Gemeindehaushalt. Gutachten des Ver. f. Soz. Pol. Leipzig: Duncker u. Humblot. 8vo. pp. 242. 4.80 m.
[A reprint, without change, of the collection of opinions published by the association in 1874.]

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SAINT-AGNAN (G. de). Le budget de Berlin depuis 1893. Paris: Guillaumin. 1904. 8vo. pp. 220. 5 fr.

SCHRÖTER (Dr. K.). Die Steuern der Stadt Nordhausen und ihre Bedeutung für die Gemeindefinanzen. Jena: G. Fischer. 8vo. pp. 100. 3.50 m.
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BARKER (E. C.). Texas Revolutionary Finances. Pol. Sci. Quart., Dec. [The actual cash cost of the war of Texan independence, 1835–36, was not great. Loans in the United States were the only important resource.]

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GIFFEN (Sir R.). Local Extravagance and Imperial Burden. Contemp. Rev., Jan.

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Nov. [Opposes municipalization of the gas plants.]

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[A series of essays which contend that "the taking of something for nothing is suicidal."]

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[Discusses the general principles of poor relief, with especial reference to American conditions. Valuable from the scientific as from the practical point of view.]

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[This volume contains: (1) Digest of the Governor's Messages of 1903, (2) Summary and Index of State Legislation, 1903, (3) Reviews of State Legislation from Oct. 1, 1902, to Oct., 1903. In the third part there are reviews by W. M. Daniels, on "State Finance," F. R. Clow, on "Local Finance," F. A. Fetter, on "Taxation," B. H. Meyer, on "Transportation," W. A. Scott, on "Banking," A. F. Weber, on "Labor," and by equally competent writers on other subjects.]

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